



THE CHEMIST AND DRUGGIST

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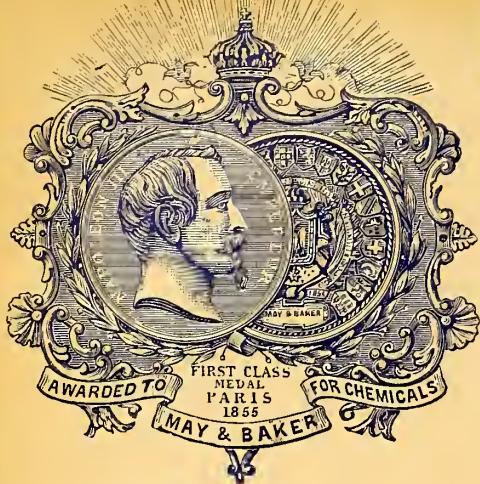
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THE CHEMIST & DRUGGIST SUPPLEMENT.

LONDON: 42 CANNON STREET, E.C.
SATURDAY, MARCH 18. 1899.

Businesses for Disposal
Businesses Wanted
Premises to Let
Auction Sales

ALSO EXCHANGE COLUMN.

For Bargains see last page of this Supplement.

Partnerships
Situations Vacant
Situations Wanted
Miscellaneous

A Copy of this Supplement is inserted in every number issued of "The Chemist and Druggist."

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

VENDORS have the advantage of Messrs. O. & Co.'s direct attention and advice as to value without additional fee.

PURCHASERS are invited to forward a statement of their requirements, which will be notified in a register free of charge.

VALUATIONS having always been a prominent feature, Messrs. O. & Co. trust that the lengthened period during which they have enjoyed the confidence of the profession will be regarded as a sufficient proof of the sincerity of their endeavours to conduct these transactions in an honourable and straightforward manner.

1.—£1,100.—LONDON, N.W.—Good-class Retail and Dispensing, with considerable sale for own proprietaries; returns last year about £1,100; increasing; net profit £360 (proofs to be given); handsomely-fitted shop and large stock; modern house, held on long lease; price £900.

2.—£900.—NORTHERN SUBURB.—Well-established Business, well situate in good business thoroughfare; returns present rate £900 yearly, with excellent profits; modern-fitted shop and good working stock; modern residence, held on long lease; price about £850.

3.—£1,300.—LONDON, W.—Old-established Business, Dispensing and Retail; returns last year £1,300; very good profits (about 50 per cent.); attractive shop, situate in close proximity to busy railway station; commodious residence; price £1,000.

4.—£1,800.—LONDON, N. (First-class Residential Locality).—Old-established Business, Dispensing and Retail; returns average £1,800 per annum; net profit about £650; nicely-fitted shop, very attractive in appearance; commodious house, new lease will be granted; price £1,500.

5.—£500.—LONDON, N.W. (Residential Locality).—Dispensing and Retail Business; corner position; returns between £450 and £500 per annum, can be largely increased by an energetic man; good residence, private entrance; price about £320.

6.—£1,300.—CRYSTAL PALACE DISTRICT.—Good-class Dispensing and Retail Business; returns last year £1,300; net profit £400; attractive shop, handsomely fitted and well stocked; comfortable residence; 21 years' lease; price £1,200.

7.—£300.—LONDON, N. (Main Road).—Dispensing, Prescribing and Retail Business, with Post Office; returns between £250 and £300; net profit about £150; convenient house; price £270, or offer entertained.

Particulars of any of the above
N.B.—NO CHARGE
TO PURCHASERS.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.
Messrs. ORRIDGE & CO. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the special attention of a London Agent.

SPECIAL NOTICE.—Messrs. ORRIDGE & CO. have a large number of Businesses for Sale
suitable for Gentlemen with small capital, from £200 to £500.

ORRIDGE & CO., 32 LUDGATE HILL, LONDON, E.C.

BUSINESSES WANTED.

ADVERTISER is open to purchase a good-class Retail and Dispensing Business, in London or County, returning £1,000 to £1,500, and showing a net profit of £300 to £500; cash ready and can take immediate possession. Send full particulars, in confidence, to "Major" (63/9), Office of this Paper.

COAST, or Health Resort.—Wanted to Purchase, a genuine Retail Business; cash ready up to £500; Branch or neglected Business not objected to if it can be improved; please give full particulars in first instance, to save correspondence, in confidence. "Ferrim" (60/1), Office of this Paper.

ADVERTISER is desirous of purchasing, for cash, a good-class Retail and Dispensing Business, showing a net profit of not less than £300; North of England or Midlands preferred, but not essential if business is right. Apply, in confidence, to R. W. Houfe, Olaremont, St. Catherine's, Lincoln.

IN London or Wales; advertiser wishes to purchase a genuine Retail and Dispensing Business; must bear a strict investigation. Apply, in confidence, to "Gobaith" (62/14), Office of this Paper.

WANTED, immediately, genuine Country Chemist's Business; no objection to Mixed; with good house, and at price from £300 to £400. State full particulars, to save time (not Black Country), "Vino," Southall Bros., Bull Street, Birmingham.

WANTED, to purchase a good sound Business showing a net profit of £500 or £600 per year; must be open to every investigation; West of England preferred. "Bona-fide," c/o Hearon, Squire & Francis, Southwark Street, London.

WANTED immediately, a good, sound Retail and Dispensing Business doing £800 or upwards, or a Partnership with a view to succession: capital to invest, about £1,250; locality no object, providing there is a decent house. Apply, F. S. M., 36 Harcourt Road, Brockley, S.E.

SALES BY AUCTION.

3s. 6d. for 50 words or less; 6d. for every 10 words beyond.

Early Sale.—FINSBURY, E.O.—The well-made Mahogany Fixtures and Fittings, comprising Counters, Glass Showcases, Sponge-cases, Window-fittings, quantity of Coloured Glass Bottles, Carboys, Linoleum, Gas-fittings, Office Furniture, Iron Safe, Bentwood Chairs, and numerous other items.

MESSRS. TILLETT & YEOMAN have been instructed by Messrs. Schacht & Co. (who have removed to new premises) to Sell by Auction the above Fixtures and Fittings on the Premises, 26 Finsbury Pavement, E.O., on Monday, March 20, 1899, commencing at 12 o'clock precisely. On view morning of Sale. Catalogues may be had at the Auctioneers' offices, 32 Finsbury Pavement, E.C.

F. J. BRETT

VALUER,

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References to Principal London and Provincial Wholesale Houses, also to numerous clients throughout the United Kingdom.

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VALUATIONS.—The long and varied experience of F. J. BRETT in Valuing all classes of Businesses throughout the United Kingdom, together with his ever-increasing connection, renders it desirable that you should secure his services, in order to have your interests well protected. Stocks carefully taken.

£900 returns.—**MANCHESTER.**—First-class Retail and Dispensing, in good residential locality; good shop and convenient house, on lease; net profit £350; price £900.

£770 returns.—**MANCHESTER.**—Light Retail and Dispensing, in good locality; fine corner shop and house, on lease; net profit £270; price £600.

£400 returns.—**MANCHESTER.**—General Light Retail, Dispensing, &c., in growing district; good house; price £250, or valuation.

£1,100 returns.—**LINCOLNSHIRE.**—Very old-established Business in market town; good Family Trade, and some Agricultural and fair Dispensing; large house, good garden, lawn and conservatory; valuation of stock and fixtures about £800.

£500 returns.—**BIRMINGHAM.**—Light medium-class Retail; returns improving; good house; at valuation, about £350.

£670 returns.—**LEICESTER.**—Light Retail, in good business thoroughfare; returns steadily increasing; good house; at valuation, about £350.

£750 returns.—**LANCS.**—Good old-established concern; easy distance of Manchester; vendor selling through ill-health; price £600.

£600 returns.—**LONDON, W.**—Dispensing and Light Retail; Branch; energetic man could vastly improve returns; price £250, or valuation.

£1,000 returns.—**LONDON.**—Good-class Retail, Prescribing, Dispensing, and own preparations; mostly cash; good house, lease; price £750.

£500 returns.—**NOTTINGHAM.**—Well-fitted Light Retail, Prescribing, and fair Dispensing; steadily increasing; valuation about £400.

WANTED.

F. J. BRETT has numerous inquiries for Businesses of all sizes and classes, and can speedily sell your Business for you.

BERDOE & CO.

CHEMISTS' TRANSFER AGENTS AND VALUERS,

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Established 1870.

VALUATIONS are in all cases conducted by a member of the firm, and the most careful attention to details, which is so essential, may be relied upon.

1.—**MIDLANDS** (Death vacancy).—Retail, Dispensing, and Prescribing Business; returns £1,400; net profit about £350; price £600.

2.—**SUFFOLK.**—Retail and Prescribing Business; market town; returns £678; rent £28; good house and garden; price £450.

3.—**DEVON.**—Retail, Dispensing, and Prescribing Business; returns £500; rent £35; good house, large garden; price £250, or valuation.

4.—**YORKS**—Light Retail and Dispensing Business; returns £461, capable of increase; price £300, or valuation.

5.—**LINCS.**—Retail, Prescribing, and Agricultural Trade; returns £1,200; net profit £300; valuation only, about £300.

6.—**SUFFOLK.**—Unopposed Retail and Prescribing; returns £450; net profit £150; rent £20; good house and garden; price £275.

7.—**ESSEX** (Mid).—Market town; County Retail Business; returns £850; net profit £320; price £600; Partner taken.

8.—**OXFORDSHIRE.**—Retail and Prescribing Business; returns £7 weekly; low rent, good house; price £180, or valuation.

9.—**WORKSOP.**—Retail and Prescribing Business; returns £350; low rent; must sell; stock and fixtures worth £160; price £100.

10.—**BRIGHTON.**—First-class Retail and Dispensing Business; returns nearly £1,000; net profit £300; price £750; recommended.

11.—**YORKS.**—Retail and Prescribing Business; returns £700; rent £35; good house; well fitted and stocked; price £450.

12.—**BEDFORDSHIRE.**—Excellent position, market town; returns £8 weekly; price £225, or valuation.

13.—**LONDON (Suburb).**—Retail, Dispensing, and Prescribing Business; returns £1,250; net profit £400; net rent £10; price £650, or valuation.

14.—**LONDON SUBURB.**—Family Retail, Dispensing, and Prescribing Business; returns £1,300; net profit £420; rent £45; price £850.

15.—**LONDON, N.E.**—Main road; Retail and Prescribing trade; returns £8 weekly; rent £35; price £200 or valuation.

BUSINESSES WANTED.

MESSRS. BERDOE & CO. have a number of clients wanting to purchase Businesses.

NO CHARGE TO PURCHASERS.

36 JEWRY ST., FENCHURCH ST., CITY.

JUDD & MANNERS

CHEMISTS' VALUERS,

Transfer Agents, Partnership Negotiators, Arbitrators and Accountants,

76 CANNON STREET, LONDON, E.C.

YORKSHIRE VILLAGE.—Mixed Dispensing, with Wines and Spirits; returns £1,050; net profit £300 to £350; nicely fitted and well stocked; price £650. [395]

NORTHERN CITY.—Two high-class Dispensing Businesses, together or separately; net profits £350 and £260; prices £900 and £600 to an immediate purchaser. [393]

SEASIDE TOWN.—Owing to mental affliction; for immediate sale, first-class Dispensing and Retail Business; returns £1,260; very profitable; handsome corner, with two good windows; price £1,000, or reasonable offer if made promptly. [391]

Particulars of either of the above free on application.

VALUATIONS for Probate or Transfer by a fully qualified member of the Firm. Books Audited, Balance Sheets Prepared, and Chartered Accountants' Certificate given.

THOS. TOMLINSON & SON

Chemists' Transfer Agents and Valuers,

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£1,314 returns.—**SUBURBS, NORTHERN TOWN.**—Good-class Pharmacy; 7,000 prescriptions annually; appointment (optional) which pays rent; good house; separate entrance.

£700 returns.—**NORTHERN CITY.**—High-class Pharmacy, in fastable suburb; steadily increasing business, with Doctor's patronage & dispensing; convenient dwelling-house; pleasant neighbourhood.

£800 returns.—**LANCASHIRE TOWN.**—Genuine old-established Retail Business; rent £30, with house; price, valuation; also Mineral Water Works at option of purchaser; part purchase-money might be on approved security, if desired.

Particulars of Businesses of various sizes and localities free on application.

NO CHARGE TO PURCHASERS.

Telegraphic Address—"TOMTOM." Telephone No. 3965, National.

BUSINESSES FOR DISPOSAL

3s. 6d. for 50 words or less; 6d. for every 10 words beyond.

CHESHIRE.—For immediate Disposal, old-established Retail, Dispensing, and Prescribing Business; good opening for young beginner with dwelling-house £55; stock, fixtures, and fittings at valuation (about £165). Apply to J. R. Simm & Sons, Estate Agents, 56 Hanover Square, Birkenhead.

GLAMORGANSHIRE.—Branch Shop for Sale, for value of stock and fixtures, about £150; part of purchase-money can remain at interest; returning £6 weekly under improver, could be trebled by a tool man; rent £24, part sublet for £13, or can be had on lease; will bear strictest investigation; no opposition for miles. "Genuine" (62), Office of this Paper.

GLOUCESTERSHIRE.—Old-established good-class Light Retail Business, in country town, having Gilbey's Agency attached, no opposition; well-fitted and heavily-stocked shop, with good house; has 12 years to run; returns £860; price £650. Apply to "King" (582), Office of this Paper.

HAWORTH, YORKSHIRE.—To be Sold, as a going concern, at valuation of Stock and Fixtures, a Family Dispensing and Prescribing Business, in leading thoroughfare of a growing district; no opposition; late proprietor dead; rent £50 per year; no goodwill. Apply, at once, to John Hugill, Compton Buildings, Keighley.

HULL.—£150.—Cash Retail and Prescribing Business in working-class district in Hull; doing from £5 to £6 weekly; capable of increase; Extractor could do well; practically no patients; large house in perfect condition; rent £25 and taxes; lease; price £150. Apply, "Exotheum" (59/7), Office of this Paper.

KENT (Market town).—Cash Retail and Dispensing shop, returning about £2,500 a year; very handsomely-fitted shop in good position, price to include valuable lease and heavy stock, £2,000, or purchase by valuation could be arranged. Apply, "Invicta," c/o Messrs. Edwards & Son, 157 Queen Victoria Street, E.C.

LANCS.—Light Retail and Prescribing; established two years; rising neighbourhood; increasing returns; about £400 required. "Meathol" (59/6), Office of this Paper.

LEEDS.—Century-old Business, in populous district, suitable for skilled Extractor and Dispenser with small capital; valuable popular practice with stock and fixtures. Saxon, 65 St. Peter's Street, Leeds.

LINCOLNSHIRE (North).—Good Family Retail and Agricultural Business, with a little local Wholesale; market town; returns for last 3 years average £1,000 to £1,200; good resident and excellent business premises attached to the shop; rent £38 (very low); lawn, greenhouse, &c.; cash buyer only treated with; valuation only required, about £800 to £900; stock can be somewhat reduced if necessary. Apply, "Genuine," Loftus & Saltmer, Wholesale Druggists, Hull.

LONDON, S.W.—Good-class Business in splendid position; average weekly sales, £7 10s.; vendor going abroad; to effect a speedy sale, £130 down will be accepted; splendid opportunity for small capitalist. Address, T. H., 104 Waterloo Road, S.E.

LONDON, S.W.—Main road, busy neighbourhood, surrounded by factories; returns about £200, which can be easily doubled, few patents and no Proprietary being kept; plenty of scope for Teeth Extraction, which has not been done; rent £50, let off £22. Particulars, B.S.F., 3/6, Office of this Paper.

NOTTS (Dukeries).—£360 returns, increasing; thickly-populated neighbourhood; personal attention required, hitherto been under management of unqualified Juniors; proprietor leaving the trade, desires to sell immediately good 7-roomed house, private entrance: established 8 years; worth £180, to a cash purchaser £120; capital chance to start healthy. 61/36, Office of this Paper.

PORTSMOUTH.—For immediate Disposal, in great position, well fitted and stocked Shop with good house and garden; very profitable business: has been carried on for 40 years; death sole cause of selling: a return to up-to-date Chemist and Prescriber; price £375; rent £55. prop. C. Consell, Auctioneer, Portsmouth.

SHROPSHIRE.—Good-class Retail. Prescribing, and Dispensing, at good prices; pleasant country; low rent; lease if desired; price £280; considerable scope for increase; every investigation courted, and all particulars readily given: this is a really genuine concern and safe investment. "Mel." (61/11), Office of this Paper.

SOUTH WALES.—Large seaport town; Retail and Prescribing; returns £500, large scope for increase; price £400; no agents. Apply, "Genuine" (59/30), Office of this Paper.

STAFFORDSHIRE.—Death Vacancy.—For immediate Disposal, a good Dispensing and Prescribing Business; old-established; shop well fitted and in best position in market town; good house and premises to be had with lease; price about £300. Apply, Miss Poyer, Market Place, Uttoxeter.

WILTSHIRE.—Light Retail and Prescribing Business, under Junior management, with scope for increase: returns are £500, at full price: good house and premises, low rent; double-fronted shop, well fitted and stocked; price £275 or offer. Apply, "Branch" (63/10), Office of this paper.

AN unopposed Country Business, Prescribing and Retail, making a net profit of £3 weekly, after buying all: qualification not essential, but knowledge of medicine and minor surgery is; present incumbent going into profession: banker's reference given and required; no agents. Statim" (57/28), Office of this Paper.

CASH Retail and Prescribing Business; 2 miles out of Lancashire town; last year's returns £562; good profits; price £400; only bona-fide buyers treated with: no agents. For full particulars, apply,erry (57/25), Office of this Paper.

FOR SALE (a Bargain), good-class select Retail Business, returning about £700, with good profits; price £550 for quick sale; rent £65; good house and premises, with fair-sized garden; proprietor taking larger concern: only bona-fide purchasers treated with; no agents. "Celluloid" (51/8), Office of this Paper.

GENERAL, Retail, Prescribing. Agricultural, Tooth-drawing, with some Dispensing: established by proprietor nearly 5 years: returns st year £678, increasing; good profits; vendor's property, who will let as required: rent £28; lowest price £475, which will include hook-debts worth £50; cash purchaser only entertained; introduction given. Address, "Astas" (47/32), Office of this Paper.

HIGH-CLASS Business in residential Suburb of Northern City: returns £1,300: convenient house, separate entrance; a thoroughly good concern: books kept on a reliable system showing all details: principals only dealt with. Apply, "Borax" (208/39), Office of this Paper.

PARTNER or purchaser wanted for small, old-established Manufactory of Specialities in Druggists' Sundries; present trade only amongst London Wholesale: excellent nucleus for extension to Country and Shipping: Foreign Agencies offered; energetic man with a few hundred pounds could create a large business. Address, Speiler, Broad Street House, E.C.

FOR Disposed of a well-established Wholesale Drug and Manufacturing Business, with a good connection and excellent reputation; the premises are light, commodious, convenient, and well arranged; the plant modern, and comprises latest improvements; several Specialities are attached to the business, which includes no heavy trade, and altogether affords unusual opportunities for a high-class Druggist, for a provincial town desiring a London depot and manufactory, or a City house in need of additional facilities and space. Address, "Drugs," o/o Reynell & Son, 4 Chancery Lane, W.C.

FOR Chemists.—Capital opportunity for beginner.—Genuine old-established Business under management; price, including all utensils and stock-in-trade, £130. Messrs. Chandler & Sons, 110 St. John's Hill, Clapham Junction, S.W.

£550 RETURNS: good-class old-established Retail Prescribing and Dispensing Business, in large provincial town; main street; well stocked and fitted; very profitable; capable of great increase; has been neglected owing to ill-health; full investigation invited; price about £425. 62/30, Office of this Paper.

TO LET.

3s. 6d. for 50 words or less; 6d. for every 10 words beyond.

SHOP (handsome) to Let, No. 570 Leytonstone Road; best part, next post-office: 8 unusually comfortable dwelling-rooms, very long garden, back entrance, &c.; rent £50; splendid opening for a Chemist, apply on premises, or to Mr. Bacon, 25 Liverpool Street, E.C.

SITUATIONS OPEN.

3s. 6d. for 50 words or less; 6d. for every 10 words beyond.

RETAIL.

ALDERSHOT.—Junior Assistant; indoors; must be active and obliging. State full particulars, including salary required, to J. Williams, Pharmaceutical Chemist, Aldershot.

ALDERSHOT.—Junior Assistant; indoors; knowledge of Photography and Teeth-extracting preferred. Send full particulars and photo to Allen & Lloyd, High Street, Aldershot.

ALFRETON (near).—Immediately.—Wanted, a steady and trustworthy Assistant, accustomed to a Mixed Country business; hours 8 to 8; no Sunday duty; easy place for good man; good references. Usual particulars to W. F. Croft, Post Office, Tibshelf, Alfreton.

ASHBURTON.—Wanted, at once, qualified Junior; indoors; easy hours, no Sunday duty; £30 per annum. Ashburton Drug Company, Lim, South Devon.

BANBURY.—Wanted, Junior Assistant; outdoors. Send full particulars, and photo, if possible, to Fox, Chemist, Banbury.

BATH.—Improver wanted; comfortable home; time for study. J. G. Hall, 56 Southgate Street, Bath.

BICESTER.—Wanted, at once, an indoor Assistant, about 24: qualified preferred. State age, experience, references, and salary required, with photo (to be returned), to J. Bates, Chemist, Bicester.

BIRMINGHAM.—Wanted, a competent Junior Assistant, as Dispenser. Apply, with full particulars, and photo, if possible (which shall be returned), to Magor, Limited, 47 Great Charles Street, Birmingham.

BIRMINGHAM (Near).—Junior or Improver at once, for quick Cash business; Light Retail and Prescribing; close Wednesdays from 2 till 6 o'clock; comfortable home. Apply, stating salary required, and references, to Cullingford's Cash Drug Store, Hay Mills, Birmingham.

BIRMINGHAM.—Qualified Assistant wanted, with good experience in first-class Retail and Dispensing business; a thorough knowledge of Homoeopathy essential; outdoors. Apply, giving usual particulars, to Radford, Chemist, 14 Union Street, Birmingham.

BIRMINGHAM.—Trustworthy Assistant for Mixed business (oils, colours, and photography), a reliable man with good business tact and ability only, wanted at once. Apply, with references and particulars, W. George Wilkinson, 48 Gough Road, Edgbaston, Birmingham.

CAMBERLEY (Surrey).—Junior Assistant or Improver for a select business; gentlemanly and neat in work, and with knowledge of Photography preferred; time for study if required. State particulars, with salary required (in or out doors), to Ralph J. Evans, Dispensing Chemist, Camberley.

DORKING.—Assistant or Junior, in good-class business, to live on premises with caretakers; hours easy. Send full particulars, photo, when free, and salary expected, to F. W. Douhleday, Dorking, Surrey.

EASTBOURNE.—Junior Assistant wanted in first-class Dispensing business; hours, 8 till 8. State previous experience, age, height, and salary required, with references, send photo, if convenient, B. K. Earnshaw & Co., 1 Victoria Place, Eastbourne.

FALLOWFIELD (Manchester).—Wanted, a Junior Assistant (indoors, preferably one just out of his time), accustomed to Dispense and used to the routine of a good class of business. State height and other usual particulars, and enclose photo, if convenient, Frederick Boor, Fallowfield, (3 miles out) Manchester.

FOR THE EAST.—Good opening for a thoroughly competent, qualified Manager, with first-class City experience, about 27 to 30; must be energetic, active and capable; commencing salary, say £225; free passage out and home, and free quarters; 4 years' agreement. By letter to Dakin Brothers, 87A Leadenhall Street, E.C.

GRAVESEND.—Wanted, an Improver, about 20, indoors, for a Retail and Dispensing business, with a little Photography. Applicants will please give full particulars, E. Millhouse, 26 New Road, Gravesend.

HANLEY.—Wanted, an energetic, trustworthy, qualified Assistant: about 24; one used to a good, quick country trade with Prescribing and Tooth Extracting preferred; must be competent to take charge; weekly half-holiday; must have reliable references; enclose photo; applications not answered within a week declined. Edmund Jones, Chemist, Hanley, Staffs.

HEREFORD.—Wanted, a thoroughly good Junior (outdoors) in Dispensing and Light Retail business; one only kept. Apply, with full particulars and photo (to be returned), to W. E. Haines, Chemist, Hereford.

HERNE BAY.—Assistant or Junior, about 21, immediately, for Light Retail and Dispensing; must be smart and gentlemanly in appearance. State age, height, reference, salary required, when disengaged, and enclose photo (to be returned), F. H. Neale, 33 and 34 Mortimer Street, Herne Bay.

IPSWICH.—Junior Assistant (knowledge of Photography preferred) for high-class Retail and Dispensing; 3 others kept. State salary (indoors), and usual particulars, enclosing photo, Pain & Bayles, Ipswich.

LANCASHIRE.—Qualified Assistant, to take sole charge. Apply, stating age, salary, and full particulars, to John Howarth & Co. (Lim.), Burnley Road, Padiham.

LIVERPOOL.—Part-time Assistant.—Mr. W. A. Grace, 41 Prescot Street, Liverpool, is in immediate want of part-time Assistant: mornings and afternoons offered with board, or afternoons only with small

PARTNERSHIPS.

PARTNER required, Mixed Chemist and Stationery; country; no opposition; returns about £1,500: very profitable; can be much

SITUATIONS OPEN—cont.

RETAIL—continued.

LONDON, N.—Immediately, a smart Assistant, gentlemanly appearance and address, from about 22 to 26 years of age; personal interview if possible. F. E. Savage (late Bird), Orooch End, N.

LONDON, W.—Assistant; qualified; about 23; used to good-class business and good Dispenser. Apply, personally, if possible, Whitmore Barker, Chemist, 288 Elgin Avenue, Maida Vale, W.

LONDON, N.—March 27: competent Junior (unqualified) for a modern Pharmacy: London, north; aged 22 or 23; comfortable indoor berth. "Celeritas," c/o Messrs. Willows, Francis & Thompson, 40 Aldersgate Street, E.C.

LONDON, W.—Wanted, by April 6, a Junior Assistant, to put up stock and assist Dispensing; qualified; outdoors. Apply, with full particulars, to John F. Harrington, 45 Kensington High Street, W.

LONDON, N.W.—Junior or Improver for Dispensing and Light Retail; good home; after Easter. Apply personally, or by letter with photo, stating salary required, &c., to "Perfect," 72 Craven Park Road, Harlesden, N.W.

LONDON, W.—Immediately, a competent, qualified Assistant, for a good-class Dispensing and Light Retail business; must be an accurate Dispenser. W. Pickard, 3 West Kensington Terrace, W.

LONDON, S.W.—Assistant wanted, about 23, who has had London experience. F. W. Warren & Co., 340 Harrow Road, London, W.

LONDON, N.W.—Wanted, a second Assistant for the Dispensing counter of a high-class Dispensing business where three are kept; also a Junior or Improver; good salaries and comfortable home offered to suitable men. Apply to T. H. Bateman & Co., Pharmaceutical Chemists, 223 Finchley Road, N.W.

LONDON, S.W.—Wanted, at once, active Junior, aged 19 to 21, in good-class Retail and Dispensing business; indoors. Apply, with usual particulars, to H. A. Legg, 53 Wilton Road, Victoria, S.W.

LONDON, S.E.—Wanted, smart Junior or Improver, for good-class retail and Dispensing business. Apply, Brindley Grice, Ph. Chemist, Rosendale Road, West Dulwich.

LONDON, S.E.—Immediately, Junior (indoors); must have good references. Apply, with full particulars as regards salary required, references, &c. (personal application preferred), to C. Bunker, 135 Great Dover Street, S.E.

LONDON, S.W.—Junior Assistant; indoors; personal application preferred. J. H. Shacklock, 239 High Road, Streatham, S.W.

LONDON, W.—Qualified Assistant, as Manager; outdoors; hours 9 to 9.30, Saturdays 11; no Sunday duty; one accustomed to Store business preferred; aged 25 to 30; also Junior Assistant. Strickland, 28 Broadway, Baling, W.

LONDON, S.W.—Junior; 25s. weekly (outdoors); no Sunday work. "Pharmaceutical Chemist," 131 High Street, Putney.

LONDON, S.W.—Smart, young, qualified Assistant, at once; well up in quick Dispensing; personal application preferred; salary £60 (indoors). O. H. Booth, 394 King's Road, Chelsea, S.W.

LONDON, N.—About April 4, a Junior Assistant, good at counter; indoors; early evening weekly; half-holiday fortnightly; time off daily; Sunday duty every fourth Sunday. Please address full particulars to "Chemist," 675 Holloway Road, Upper Holloway, N.

LONDON, N.E.—Wanted, at once, an experienced and energetic Assistant; indoors; comfortable home. Apply personally if possible, or send full particulars as to age, height, salary required, experience, &c., Thomas, Chemists, 411 Mare Street, Hackney, N.E.

LONDON, S.W.—Immediate.—Wanted, a trustworthy indoor Minor Assistant; one who has been accustomed to a good-class Retail and Dispensing business; must be well recommended. Apply or address, with full particulars age, height, salary, reference, and photo (to be returned), to "Iris," 317 Fulham Road, Brompton, London, S.W.

LONDON SUBURB.—Qualified Assistant wanted one day a week (Wednesday). Apply, with full particulars, to 60/33, Office of this Paper.

LONDON, S.W.—Junior Assistant, unqualified, for Stock or Counter; one not afraid of work, and who will make himself generally useful; usual shop hours and alternate Sunday duty; weekly half-holiday. Apply by letter, with usual particulars, stating age, height, and salary required, "Statim," 118 Falcon Road, Clapham Junction, S.W.

LONDON, S.E.—Junior Assistant wanted for Retail Department. Apply, J. E. Lockyer, 87 Evelyn Street, Deptford, S.E.

LONDON, W.—A Junior Assistant, in good-class Dispensing business; personal application preferred; if by letter, give full particulars, enclosing photo. T. Turner, 232 High Road, Chiswick, W.

LONDON, W.—Wanted, at once, Improver, or Junior Assistant; indoors. Apply, personally or by letter, stating all particulars, to Reece & Co., Pharm. Chemists, 53 Gt. Marylebone Street, Portland Place, London W.

LONDON, N.—Qualified Manager wanted, at once, for Branch Store, N. London: hours 8.30 to 10; alternate Sundays 6 to 9; outdoors. Apply, 62/9, Office of this Paper.

LONDON, N.E.—Junior, indoors (salary £26), or Apprentice (small premium, to be returned as salary); good living, comfortable home, &c.; one night off, weekly; three hours' duty every other Sunday; established business; references, &c., required. Apply, R. S. 224 Brick

LONDON, W.—Junior; unqualified; indoors; good writer. Apply, in first instance, by letter, to Messrs. Hearon, Squire & Francis, 33 Southwark Street, S.E.

LONDON, W.—Qualified Assistant; indoors; good Counterman, and accustomed to good-class Store trade; must be steady and reliable. Apply, with full particulars, to J. W. Webber, Chemist, 202 High Road, Chiswick.

LONDON, S.W.—Wanted, at once, qualified Assistant; outdoors; hours 9 to 7. Apply, by letter only, stating full particulars and salary required, "Chemist," Haymarket Stores, 28 Haymarket, S.W.

LONDON, N.W.—Two Assistants wanted for high-class Cash trade; one as Dispenser, quick, neat, and accurate; good salary for reliable man; the other a Counterman, with Photographic experience; salary and commission; indoors. Apply, "Manager," 265 Finchley Road, N.W.

LONDON.—An experienced Assistant, also a Junior (indoors), immediately. Apply, D. Morgan, 293 Pentonville Road, King's Cross.

LONDON (City).—Wanted, Assistant, qualified (speaking German preferred), for easy situation in the City; or German Assistant with long experience in England. Apply, R. Howden, 28 Gracechurch Street, London, E.C.

LONDON, N.—Manager, about April 1st; not over 30 years; must have good references. State age, height, salary required, experience, &c., or apply, personally, A. Long, Chemist, 26 Stamford Hill, N.

LONDON, W.—Wanted, at once, smart Junior; good Stockkeeper, and able to Dispense; aged about 21. Apply, with full particulars, Jones & Bowles, 221 High Street, Kensington.

LONDON, N.E.—Messrs. A. P. Barnard & Son, 309 Hackney Road, N.E., have a vacancy for a Junior after Easter; one accustomed to a London suburban or middle-class country trade, and about 21, just out of his apprenticeship, preferred; 2 kept; good opportunity to gain experience; state salary (indoors), when disengaged, references, &c.

LONDON, N.W.—About March 24, an Assistant who has had experience in a good-class Dispensing and Retail business. Apply personally, or send carte (to be returned), with usual particulars, stating salary required (outdoors). Hours reasonable. J. Noble, 116 Craven Park Road, Harlesden.

LONDON, N.W.—Smart Junior, at once (outdoors), in brisk Retail and Dispensing business; no Sunday duty; time off for study could be arranged. Apply, personally if possible, or send full particulars (with c.d.v.) as to age, height, salary required, experience, &c., to Goodchild, Drug Stores, High Street, near Willesden Junction.

LONDON, W.—Wanted, an Assistant for April 12; must be quick and accurate Dispenser; about 24. State usual particulars and salary required, Squire & Co., 22 High Street, Notting Hill, London, W.

LONDON, W.—Good Junior for Dispensing business, not under 21 years of age, with previous London experience. Apply personally, Wilson, Turnham Green Station.

LONDON, S.W.—Junior wanted, temporarily, probably permanently. Apply, between 11 A.M. and 3 P.M., at 606 Fulham Road, S.W.

LONDON, N.—Junior Assistant wanted; hours from 8.30 to 9.30; two hours allowed each afternoon for recreation or reading. Apply, stating usual particulars, and enclosing photo if convenient, Geo. Daniel, Chemist, High Street, Wood Green, N.

LONDON, W.—Wanted, qualified Dispenser, outdoor; must be tall, experienced, and of good appearance; Sunday duty, three hours every third; evening weekly. Apply, with usual particulars, to Faulkner & Co., Ltd., 173 Ladbroke Grove, W.

MAIDENHEAD.—Wanted, an active Junior Assistant; accurate Dispenser; good address; abstainer. Apply, giving full particulars, A. Upson, Chemist and Optician, 35 High Street, Maidenhead.

MANCHESTER.—Junior Assistant wanted by April 10; Photographic experience; outdoors; half-day weekly from 1 o'clock. State age, height, salary required, references, to Lockwood, Chemist, Harpurhey, Manchester.

MANCHESTER.—Improver or Junior; time for study; indoors. Whitfield & Pidd, Chester Road, Manchester.

NEATH.—A Welsh speaking qualified Assistant, for a good Light Retail and Prescribing business, with Photography; hours unusually easy; no Sunday duty. Also an Improver. Apply, J. Griffith Isaac, Chemist, Neath.

NORWOOD, S.E.—An Assistant wanted, qualified preferred, for good-class business, chiefly for Dispensing; two kept. Please state age, experience, reference, salary required (indoors), if an abstainer, and enclose photo, to "Pharm. Ch.," 25 Westow Hill, Upper Norwood.

NOTTINGHAM.—At once, Junior or Improver; one used to good Mixed business; in or out door. Apply, stating full particulars as to age, experience, salary required, &c., T. Wilson, Lenton, Nottingham.

OLDHAM.—Wanted, smart, active Junior (outdoors), about 20, for pushing Retail business; must be quick and reliable, and a good Counterman. Address, stating age, experience, references, and salary required, with photo, to J. & J. Thompson & Co. (Limited), 192 Manchester Street, Oldham.

PETERSFIELD.—Wanted, after 25th, an Assistant; qualified; abstainer preferred. Address, with full particulars, references, &c., to Mr. Nichols, High Street, Petersfield.

PONTYPOOL.—Trustworthy, competent Assistant wanted, end of this month (indoors); light Mixed trade; half-holiday weekly; no Sunday duty; an energetic man treated liberally. Apply, with carte de visite, reference, salary, to E. B. Ford, Pharmacist, Pontypool.

PRESCOT.—Smart Junior or Improver, about 19 or 20; indoors; half-holiday weekly, occasional Sunday duty; comfortable home, and time for study; grand opportunity for a young man seeking varied experience. Apply, with full particulars, salary, &c., and enclose photo if

ROTHERHAM.—Qualified Assistant; must be good Counterman, &c. Apply, J. Birch & Co., Limited, Rotherham.

SEACOMBE.—Wanted, at once, a Junior Assistant or Turnover Apprentice, about 19, in a Light Retail and Dispensing business; time allowed for recreation and attending School of Pharmacy. Apply, stating age, height, and salary expected, with reference, to Hinkley, Seacombe, Liverpool.

SLOUGH.—Assistant (22-25) wanted next week in good-class Retail and Dispensing business; good salary to smart man. 50/17, Office of this Paper.

SOMERSET.—Wanted, early in April, good Junior Assistant; outdoors; high-class Dispensing and Retail; need not be qualified, but a London experience preferred; part of duties to dispense for a Surgeon. Apply, stating age, salary asked, with reference and photo, Sage, Chemist, Frome.

SOUTHEND-ON-SEA.—Wanted, an Assistant, accustomed to first-class business. Apply, with full particulars, to F. York, Nelson Terrace, Southend.

SOUTHPORT.—Junior Assistant (outdoors), for good-class Retail and Dispensing business. State age, experience, and salary required, E. Surr, 141 Manchester Road, Southport.

ST. ANNES-ON-THE-SEA.—J. H. Taylor requires a qualified Assistant, about 23; must be a gentleman of good appearance and address, and have some knowledge of first-class business and Dispensing. Applicants please state age, height, and salary required, and enclose photo.

ST. AUSTELL.—Junior or Improver wanted in good-class Country business; good opportunity to gain thorough knowledge of the trade in all its branches; easy hours; no heavy trade; indoors. Apply, stating age, experience, references, salary, &c., enclosing photo, to Cross, Chemist, St. Austell, Cornwall.

ST. LEONARDS.—H. Thomas & Co., 14 South Colonnade, St. Leonards, will require, early in April, a qualified Assistant; indoors; business high-class. Particulars to H. J. Deacon, Warrenhurst, Bromley Park, Kent.

STAFFORD.—Wanted, a Junior Assistant, from 19 to 20, for good-class General, Retail, and Dispensing; outdoors. State age, height, and salary required, and enclose photo, J. Marson & Son, Stafford.

STROUD.—Wanted, Brauch Mauager (qualified), abstainer preferred, to live on premises; no Sunday or night duty; hours moderate; interview desired. Send usual particulars to Coley, Chemist, Stroud.

SWANSEA.—Wanted, a good Junior Assistant; able to speak Welsh preferred; indoors. State salary and age, reference, Thomas, Chemist, 33 Castle Street, Swansea.

SWITZERLAND.—Wanted, an English qualified Assistant speaking French and, if possible, German; agreeable place; Alpine health-resort (Davos). Apply to Mr. C. Fr. Hausmann, Pharmacy, St. Gallen, Switzerland.

WINDSOR.—Wanted in April, a quick, reliable Assistant, about 24; also a Junior or Improver. Apply, stating age, height, experience, and salary required, to E. E. Rowland, Chemist, 40 Peascod Street, Windsor.

WINCHESTER.—After Easter, competent Assistant, aged about 25, for good-class business, with photo branch; short hours, no Sunday duty. Apply, with references, to W. D. Gibb, Piazza, Winchester.

WISBECH.—Assistant (indoors), about 25; qualified, or good unqualified man; must be good Dispenser, and capable of taking charge. State full particulars to M. Herrod, Wisbech.

WOLVERHAMPTON.—Wanted, a qualified Assistant in good-class Retail and Dispensing business; Senior kept. Apply, stating full particulars, T. J. Gibson, Chemist, Wolverhampton.

WORCESTER.—Qualified Assistant, about 25 years of age, chiefly for the Dispensing-counter. State height, salary required, with references (photo if convenient), Messrs. George & Welch, Worcester.

A QUALIFIED Assistant (unmarried) to manage a Branch; a Junior kept; a commission allowed on the sale of Proprietaries, and a gentleman capable of pushing these, and making a profitable turnover, would have his salary increased in proportion to the profits; required to board and lodge on the premises; one who can Extract Teeth, and has some knowledge of the sale of Photographic goods. Full particulars as to salary, required, references, &c., to W. B., 2 Addington Road, Stroud Green, N.

A N Assistant, about 24 years of age, accustomed to good-class Retail and Dispensing. State age, height, and salary, to Tenison Smith, Ryde, I.W.

A SSISTANT, 22 to 30, in inland health resort, for six months; active and obliging; must be good Dispenser. Particulars as to salary required (indoors), experience, &c., with photo, to 58/1, Office of this Paper.

A SSISTANT; indoors; abstainer; accustomed to Dispensing and General Retail; qualified or good unqualified; good references required. Apply, with full particulars, to "Chemist," c/o Messrs. Edwards & Sons, York House, High Street, Wolverhampton.

CHEMIST.—Required, Assistant Dispenser for Store trade; must be duly qualified; age under 25. Apply, by letter, stating full particulars of previous engagements, qualification, age, and salary required (outdoors, West-end), to "Chemist," Obas. Tayler & Co.'s Advertisement Offices, 154-157 Fleet Street, E.C.

DAY'S METROPOLITAN DRUG CO. (LIMITED) require an Assistant, not necessarily qualified, for quick Cash business. Write, stating salary required and enclose usual particulars, to 80 Borough Road, London, S.E.

DAY'S METROPOLITAN DRUG CO. (LIMITED) have vacancy for a smart, qualified Assistant, married preferred, for London district; the appointment would be with view to ultimate Management. Write, giving usual particulars, to 80 Borough Road;

EVENING.—Wanted, an Assistant, for evening duty in the West End; must be of good address and good counterman. Apply, T. A. M. (63/13), Office of this Paper.

IMPROVER.—Fred. Barlow, Chemist, Birmingham, has a vacancy for an Improver, of good appearance and address, for good Mixed business in healthy suburb; time for study and attendance at class might be arranged; also vacancy for an Apprentice, either in or out doors.

JUNIOR Assistant, accustomed to a select Retail and Dispensing business; quick and accurate Dispenser. State full particulars, with photo, 61/20, Office of this Paper.

JUNIOR or Improver wanted at once for a Light Retail and Dispensing business in a select watering place; easy hours and comfortable home; salary to start, £25. Apply, with photo if convenient, to "West Coast," (58/30), Office of this Paper.

MANAGER, with view to early succession on easy terms; preference given to gentleman who understands Dentistry; good shop and house; middle-class trade, no heavies; old-established business (increasing), in Midland City; owner taking country business; applicant would be required to invest £100 in the business. 61/40, Office of this Paper.

QUALIFIED Manager for Branch business (seaside) by May 1; married man preferred. Apply in first instance, stating age, salary required, references, and full particulars (with photo, if possible), to H. c/o Wright, Layman & Umney, 48 Southwark Street, London, S.E.

QUALIFIED Assistant wanted, to Manage small Brauch; total abstainer; state salary required, age, experience, and enclose photo (which will be returned). Address, "Ziegib," c/o Messrs. Wright, Layman & Umney, Southwark Street, London.

QUALIFIED Assistant, about 23, for good-class Suburban business; indoors. Apply, with usual particulars and photo, to "Statim," c/o Heaven, Squire & Francis, 38 Southwark Street, S.E.

REQUIRED, by firm of Surgeons, Assistant-Dispenser and Book-keeper, for a month or longer, out of doors. Write, stating terms, and giving references, to Dr. Walters, Reigate.

SMART, active Junior wanted, in good-class Mixed Country business; must be good Dispenser, and used to high-class business. Apply, with photo, references, and salary required, to E. P. Minett, Pharmaceutical Chemist, Stansted, Essex.

SMART, active, qualified men wanted as Managers for Branches; must be good business men and capable of working up a district; good salary and prospects to steady capable men. Apply, with photo, stating age, experience, and salary required, to George O. Dusart, 135 Queen's Road, Brighton.

TO DISPENSERS.—Wanted, an Assistant Dispenser, at the Manchester Workhouse Infirmary at Crumpsall; salary £2 a week, which will be subject to such deductions as are required by the Superannuation Act. Applications, stating age, previous experience, and enclosing copies of testimonials, must be endorsed "Assistant Dispenser," and sent to the undersigned not later than 2.30 P.M. on Wednesday, the 22nd instant. Candidates must be fully qualified and certificated Dispensers. By order, GEO. MACDONALD, Clerk to the Guardians. Poor Law Offices, New Bridge Street, Manchester, 13th March 1899.

WANTED, a thoroughly reliable, energetic, all-round Assistant (outdoors) for a good-class Mixed Country business; to one desiring a permanency, and who is willing to adapt himself to the varied requirements of a Family and Agricultural trade, a comfortable situation is offered. Apply, with all usual particulars, to W. Kemp & Son, Horn castle.

WANTED, Assistant for Dispensing-counter; neatness and accuracy essential. Apply by letter, stating experience and salary required, &c., to A. B. O. (53/37), Office of this Paper.

WANTED, immediately, young qualified Assistant, married preferred, for a brisk business in London, E.; good terms for a trustworthy, reliable, and obliging man. Apply to Vause, Chemist, Margate.

WANTED, a qualified Assistant and an active Junior for a Light Retail and Dispensing business. Please state age, reference, and salary required (indoors), "Cocain," c/o Messrs. Evans, Sons & Co., Hanover Street, Liverpool.

WANTED, immediately, Junior Assistant; indoors; must have been accustomed to good-class trade. Apply, with full particulars, and enclose carte if convenient, to be returned (Welsh not necessary), 33 Broad Street, Welshpool.

WANTED, a qualified Assistant, accustomed to good-class business and with some experience in Dispensing. Apply, with full particulars, "Bromo," c/o Messrs. Barrou Harveys, Giltpur Street, E.C.

CITY OF LONDON UNION INFIRMARY.

DISPENSER.—The Guardians of the City of London Union invite Applications for the Post of Dispenser, at the Infirmary, Bow Road, E.; candidates must be between 25 and 40 years of age; the salary is £100 per annum, with dinner and tea daily; application forms, and further particulars of the duties, &c., may be obtained at my office as below; the appointment will be made subject to the approval of the Local Government Board and the provisions of the Poor Law Officers' Superannuation Act, 1896.

Application for forms will not be entertained after March 18. (By Order), F. W. CRANE, Clerk to the Guardians. 61 Bartholomew Close, E.C., March 7, 1899.

HOLLOWAY AND NORTH ISLINGTON DISPENSARY PALMER PLACE, HOLLOWAY ROAD, N.

REQUIRED, part-time Dispenser, to reside at Branch Dispensary; hours of attendance: Tuesday and Thursday, 9.30 A.M.; Monday and Friday, 5 P.M.; Wednesday and Saturday, 2.30 P.M.; also each evening at 6 to 6.30; salary 10s. per week with unfurnished rooms (4), coal, and gas. Applications, stating age and qualifications, with testimonials, to Hono-

SITUATIONS OPEN—cont.

WHOLESALE.

ANALYST.—Required, in the Analytical Department of a large manufacturing firm near London, a capable Assistant, with experience in examination of Drugs, Chemicals, and manufactured Pharmaceutical Products, qualitatively and quantitatively. Apply, by letter, giving full experience, age, salary required, &c., to D. E. H., c/o Dixon's Advertisement Offices, 195 Oxford Street, London, W.

CAPABLE, energetic young Gentlemen, who are well up in Pharmacy and Therapeutics, will find full scope for their abilities in the positions now open on the travelling Representative staff, both at home and abroad, of a high-class firm of Manufacturing Chemists. Apply, with full particulars of experience, &c., to F.S.C.L. (215/36), Office of this Paper.

DRUG PORTER.—Required by a London Wholesale Druggist a young man as Drug Porter; knowledge of the trade essential. Write, stating age, salary, and experience, to 57/4, Office of this Paper.

ESSENCE TRAVELLER wanted, having good experience of the sale of Essences, Essential Oils, Colours, &c., to Mineral Water Manufacturers, Confectioners, &c.; very favourable terms to a really first-class man. Apply, by letter, to "Essence" (Box 893), 132 Fleet Street.

FLAOURING and Soluble Essences.—Wanted, in a large old-established Works in the country, an Assistant with practical experience of this branch; none others need apply; occasional help in private office required. State age, experience, and salary required, to "Limited Company" (61/10), Office of this Paper.

IN the Research, Analytical, and Manufacturing Laboratories of a prominent firm of Manufacturing Chemists are vacancies for well-qualified gentlemen; candidates must furnish full particulars as to age, qualifications, and experience, and state salary required. Address, "Chemist," c/o Messrs. Street & Co., 30 Cornhill, E.C.

INVOICE CLERK.—Wanted, in the office of a London Wholesale Druggist, a thoroughly capable and experienced Invoice Clerk. State age, salary, and experience to 57/3, Office of this Paper.

INVOICE and Entering Clerk required. State age, previous employment and salary required, to "Town" (213/2), Office of this Paper.

LADY Pharmacist, qualified, to superintend in the Packing department, handling of preparations containing poisons. Applicant must please state age, experience, and salary required, to "Poison," c/o Messrs. Street & Co., 30 Cornhill, E.C.

TRAVELLERS already representing another firm wanted, to carry a few special lines in Sundries amongst Chemists, &c., in Provinces; small salary and a good commission given; samples about 7 lbs. weight. State ground covered, present employers, and full particulars, in strict confidence, 58/33, Office of this Paper.

TRAVELLERS.—A London Firm, manufacturing a Speciality well known in the trade, require two Travellers on commission—one for the North and one for South-west of England; must be already on the ground and taking their journeys three or four times a year. Address, "Speciality," 58/5, Office of this Paper.

TRAVELLERS Wanted in Midlands, Eastern and Southern Counties, to sell Sharman's Weed Killer; liberal commission. Special feature—Sharman's Weed Killer only to be sold through Retail Chemists, manufacturer won't supply private customers; prices protected. Full particulars on application to H. B. Sharman, Chemist, Northwood, Middlesex.

WANTED, an Analytical Chemist, of exceptionally high and proved ability and accuracy, with good experience in testing Medicinal Chemicals, to take up the position of Chief Analyst at the works of a leading London firm of Manufacturing Chemists; a gentleman who has taken University degrees preferred. Address, stating age, qualifications, and experience, to "Analyst," c/o Messrs. Markby, Stewart & Co., Solicitors, 57 Coleman Street, London, E.C.

APPRENTICESHIPS.

MANCHESTER.—Apprentice wanted in good-class business: outdoors preferred; must have passed Preliminary or equivalent; half-day holiday a week; every opportunity given to learn the business thoroughly. Whittaker, 285 Oxford Street, Manchester.

SITUATIONS WANTED

1s. for 12 words or less; 6d. for every 6 words beyond.

RETAIL.

MANAGER; London or near preferred. M. P. S., 355 Wandsworth Road, S.W.

LOCUM; qualified; abstainer; disengaged. H. Boden, 102 Pilton Street, Barnstaple.

L.T.—Town or country; qualified. Baker, 65 Leverton Street, London, N.W.

MINOR qualification: Photographic experience; careful and accurate. 62/4, Office of this Paper.

ASSISTANT; good-class business; qualified; view to succession. 61/18, Office of this Paper.

LOCUM: disengaged yesterday; excellent references. "Chemist,"

EVENING employment; E.C. district; qualified; good references. 63/8, Office of this Paper.

MANAGER, Locum, or Senior; highest references; 41. "Extractor," 24 Galveston Road, Putney.

JUNIOR: 21; tall; 4 years' experience; good references. Williams, Northgate Pharmacy, Chester.

EVENING work; qualified; London experience. "Xylem," 62 Kennington Park Road, S.E.

COUNTERMAN in Drug Store; 5 years' experience. Trowell, 15 Park Road, Sittingbourne.

WANTED, situation as Improver or Junior; tall; good address. Thursley, Brigg, Lincolnshire

AS Dispenser; good references. Apply, J., Rosslyn Cottage, Finchley Park, North Finchley, London, N.

MANAGER; qualified; 27: 10 years' varied experience in good houses. 61/21, Office of this Paper.

JUNIOR: 20; London experience; London preferred; good Dispenser; out or in. 57/8, Office of this Paper.

ASSISTANT; 21; part-time; in Manchester or district; good references. Chapman, Crowle, Doncaster.

QUALIFIED: 26; varied experience: speaking French; disengaged. Ayre, 42 Liverpool Street, London, W.C.

SMART, Qualified Assistant; aged 25; height 6 ft.; disengaged April 8. Bidie, 24 King Street, Stroud.

ASSISTANT: 28; unqualified; good Prescriber and Extractor; outdoors. F. Turton, Denby, Huddersfield.

MANAGER or Senior; qualified; tall: 29; Photography; permanency. Wroxham, Glisson Road, Cambridge.

SITUATION wanted in any capacity; outdoor; experienced; 38. "Permaneut," 19 Tunis Road, Shepherd's Bush.

DISPENSER (lady); Apothecaries' Hall certificate; Dispensary doctor. M., 6 Martell Road, West Dulwich, S.E.

DISPENSER, Locum, or Branch Manager; Hall Certificate; 2½ years' reference. "Lancastrian" (53/38), Office of this Paper.

EXPERIENCED Assistant desires engagement; permanency; 34; disengaged April 8. D., 9 Eastgate Street, Winchester.

LOCUM: disengaged all day or part of day, or every evening; Chemist or Surgery. "Gentian," 113 Great College Street, N.W.

MANAGER, Assistant, or Locum; all-round experience; disengaged; excellent references. D., 53 Halley Road, Forest Gate, E.

AS Manager, Locum, or Part-time; qualified; Chemist or Dentist; high-class Store experience. G., 54 Calcott Road, Brondesbury, N.W.

MINOR Student (22) desires summer engagement in good Dispensing business; experienced; good references. J., 7 King's Road, Windsor.

REQUIRED, situation in Drug Store; 16 years' experience; aged 30; knowledge of Photography; disengaged. "Pyro" (51/18), Office of this Paper.

PART-TIME, from about 3 P.M.; outdoors; modern Store experience; Photography, Dentistry; 24. T., 11 Sandwell Mansions, West End Lane, N.W.

PART-TIME; Morning, Evening; Chemist or Surgeon; good experience; 10 years present place. "Chemist," 84 Kingsdown Road, Holloway, N.

LOCUM or Manager; M.P.S.; disengaged; South Coast preferred; good all-round long experience. "Chemist," c/o Mr. Valler, Castle Street, Brighton.

UNQUALIFIED (45); married, no family; as Manager, Assistant, or Dispenser; Extractor, Prescriber; excellent references. "Statim," 1 Well Street, E.

QUALIFIED; 24; disengaged every evening after 7 and all day Sundays; Dispensing or otherwise. "Chemist," 39 Museum Street, Bloomsbury, W.C.

IMMEDIATE: energetic Assistant; outdoors; 37; single; abstainer; general experience; unqualified; Coast preferred. "Manager," 40 St. Andrews, Uxbridge.

MANAGER, Assistant, or Locum; 30; Extractor, good Prescriber and Dispenser; disengaged. "Particulars," 64 Lower Addiscombe Road, East Croydon.

LOCUM or Manager; qualified; London and provincial experience; good Extractor, Prescriber, Dispenser; disengaged. "Forceps" (60/17), Office of this Paper.

ASSISTANT; outdoor; married; permanency; country preferred; good country and town references. "Apenta," 28 Christchurch Street, East, Frome, Somerset.

AS Manager or Senior Assistant; Minor; 36 years of age; good Dispenser and Prescriber; knowledge of Photography. "Minor," 19 Brodia Road, Stoke Newington.

ASSISTANT; 25; tall; outdoors; 7 years' good experience, Retail, Dispensing, Photography; highest references. "Atropina," 119

EXPERIENCED Assistant; outdoors; well up in Dispensing, Extracting, and Prescribing; aged 40; tall; satisfactory references. Lloyd, Gwyther Street, Pembroke Dock.

JUNIOR (20), 5 years' London and country experience, wants berth within easy walking distance to Westminster College; time for study. "Chemicus," 351 West Green Road, Tottenham.

ADVERTISER, qualified (23), desires permanency in good Mixed business; Manchester district; 10 years' experience; good references. Address, "Iridis" (55/12), Office of this Paper.

ASSISTANT or Manager (unqualified); aged 29; 15 years' town and country experience; Extractor; knowledge of Photography; married. "Pyro" (51/18), Office of this Paper.

MANAGER, Branch or otherwise; London preferred; married; qualified; live on premises preferred; first-class references; one in family. Address, R. H. S., 95 Glyn Road, Homerton, N.E.

MANAGER or other responsible position in respectable business; qualified; married; high-class experience and references; disengaged. Thos. Milton, 8 Portland Place, Clifton, Bristol.

MANCHESTER or LIVERPOOL.—As Junior; 22; 7 years' experience; tall; time for study preferred; excellent references. "Student," c/o Evans, Chemist, Middleton, near Manchester.

MANAGER-ASSISTANT; many years' good experience, London and country; married; steady; thorough knowledge Dentistry; qualified; highest references. "Alex." 48 Wyle Cop, Shrewsbury.

AS Manager or Junior Partner; 20 years' experience in high-class business (unqualified); aged 36; height 6 ft.; can invest small capital; full particulars. "Radix," Messrs. Paine & Brettell, Solicitors, Chertsey, Surrey.

MANAGER, Locum, or Traveller; qualified; middle-aged; good Prescriber; large experience, town and country; highest references; no encumbrance; disengaged. Apply, B. Griffiths, 117 Nolton Street, Bridgend, Glam.

MANAGER or responsible position; 30 years' good experience, town and country; Chemist and Dentist; married; abstainer; disengaged; unimpeachable references. Turner, 71 Sussex Road, Holloway, London.

ASSISTANT-MANAGER; permanent or temporary; 36; 20 years' town experience, Dispensing, Retail, Prescribing, Extracting, Manufacture, Stock; best credentials and references. "Competent," 32 Lion Street, Walworth, S.E.

AT Home or Abroad.—Cape Colony or Johannesburg.—Good Dispensee, Prescriber, and Extractor; hospital practice; served apprenticeship but never sat for exam. Address, Edward Bouvierie, c/o Mr. Coombs, Auctioneer, Thurland Street, Nottingham.

UNQUALIFIED Medical Assistant, 20 years' practical experience, requires engagement with Medical man or Chemist; married and family; steady and reliable; good Dispenser, bookkeeper, Prescriber, and Extractor; excellent references. State salary, Wilson, Eccleshall, Staffs.

WHOLESALE.

WHOLESALE Situation desired; 7½ years' varied experience. "Phenosa," 33 Thayer Street, W.

WHOLESALE situation desired; experience Retail, short Wholesale. Eggleton, 51 Sidmouth Street, W.C.

YOUNG Frenchman desires engagement in Drug office or Warehouse; salary no object. 58/23, Office of this Paper.

TRAVELLER, by Chemist, having sold business; 31; highest references; permanency. "Yorkshire" (59/27), Office of this Paper.

GENTLEMAN, with good connection in Eastern and South Counties, desires re-engagement to call on Chemists. Apply, "Traveller" (56/6), Office of this Paper.

WHOLESALE; young man, energetic, requires situation as Wet Counterman; 3 years' experience; also 4 years' practical Retail, W. 7 Vesey Street, Poplar, E.

AS TRAVELLER.—Young man (22), with 5 years' experience of the trade, wishes to represent Drug or Sundry firm; good reference. 62/12, Office of this Paper.

CLERK requires situation in Wholesale office; 14 years' experience, Wholesale and Retail; Sorthand-writer and Type-writer; excellent references. 62/1, Office of this Paper.

ADVERTISER (qualified) desires position in the Wholesale business; good experience; good references; Lancashire preferred. Address, "Benzoin" (55/13), Office of this Paper.

TRAVELLER, Country; disengaged; large connection among Chemists, Stores, Perfumers, &c.; has covered greater part of U.K. M.R., c/o Leonard Courtney, 185½ Aldersgate Street, City, E.O.

GENTLEMAN seeks re-engagement as Traveller; established connection amongst Medical Men and Chemists in South, West, and Eastern Counties; highest references. 63/2, Office of this Paper.

A GENTLEMAN residing in Ireland, and having a large connection among Chemists, Druggists, and Medical Men throughout Ireland, is open for a Commission for Dispensing and other Bottles. 55/38, Office of this Paper.

WHOLESALE.—Energetic young man requires situation in Wet or Dry department; 8 years' first class wholesale experience; good parcel wrapper and marker; exceptional references; disengaged. "Druggist," 62 Mountergate Street, Norwich.

GENTLEMAN (35), having good connection and 15 years' experience of Gelatine, Glue, Essential Oils, Synthetic Essences, Liquorice, Olive Oil, and kindred products, desire to correspond with first-class Manufacturers with a view to acting as their Agent in British Isles; highest references. Address, "Enterprise" (62/11), Office of this Paper.

MISCELLANEOUS.

PRIVETT'S TEMPERANCE HOTEL (Close to the Pharmaceutical Society, Bloomsbury Square).—Bedroom with Breakfast 3s. 6d.; Board by arrangement; hot and cold baths; omnibuses to all parts of London. 68 Southampton Row, Russell Square, London, W.C. N.B.—The number of this Hotel is 68.

DAISY (LIMITED), Leeds, will be happy to advertise (at reasonable rates) in Chemists' Lists, &c., &c.

A N experienced Agent wanted for England and Colonies. J. M. Farina, Cologne. Address "Z. H. 1898," c/o Haasenstein & Vogler, A. G., Cologne-on-Rhine.

PROFITABLE high-class Agency offered to gentlemen having a good connection, and calling on Chemists and Druggists. Apply, J. P., c/o Eureka Flour Mills, Lenton Boulevard, Nottingham.

"PRIMUS" SULPHUR TABLETS.—1 cwt., 32s.; 2 cwt., 31s.; 5 cwt. 30s., carriage paid. Sulphur and Sarsaparilla same price; samples free. Send 3s. 6d. for 7 lb. box, post free. Christy & Co., Smithfield Laboratory, Curzon Street, Leicester.

ADVERTISER is in an excellent position to introduce Specialities, such as Soaps, Perfumes, Enemas, or small Druggists' Sundries, in Liverpool and district; correspondence solicited. In first instance, address 62/7, Office of this Paper.

"PREMIER" SULPHUR TABLETS.—Cheapest in the market and the best; 35s. per cwt., 5-cwt. lots 32s., carriage paid; special quotations for large quantities; samples free on application; Sulphur and Sarsaparilla Tablets at same rates. Tennent & Co., 504 Barking Road, London, E.

ACETATE OF LIME (Pirolignite of Lime), Brown, 65-67 per cent, is manufactured on a large scale, and sold direct to consumers, at a moderate price, by Stora Kopparbergs Bergslags Aktiebolag, Falun (Sweden).

TWO FREE SCHOLARSHIPS offered by The City School of Pharmacy, value £12 12s. and £7 7s.; examination 28th March next; candidates must have passed Pharmaceutical Preliminary; details free. Mr. Skerry, 27 Chancery Lane, London.

GENTS Wanted.—Hoult's Improved Square Chemical Chimney Cleaners (three times the strength of any pirate make); cleans chimneys in ten seconds; no sweeps or brushes required; one Agent's profit for one week, £20 clear. Address Square C. Depôt, Unique Co., Rotherham.

ACCIDENTAL Poisoning prevented by using the Patent Caution Label; this label, having a roughened surface, chemists can readily transform any bottle into a poison-bottle at trifling cost, thereby complying with the recent regulations; sample box containing 100 labels, assorted sizes, post free 1s. Patent Caution Label Company, Upper Hagley Road, Birmingham.

100% PROFIT ensured by selling Curic Wafers, the absolutely safe and certain cure for Headache, Toothache, and Neuralgia. Striking window show, with mechanical attraction, for one dozen order (9s.) P.A.T.A., at face value. A really sound Chemists' line, giving the utmost satisfaction to Chemists and their customers. Write for particulars to The Curic Co., Leadenhall House, Loudon, E.C.

CHEMISTS' Shop-fixtures.—Ranges mahogany drawers, with bevelled-edge glass labels and cut-glass knobs, shelving above, lockers below; mahogany dispensing-screens; counters with glass-case fronts; wall-cases; bent-front and flat-top counter-cases; counter-decks; tooth-brush cases; complete shop-rounds, &c.; every requisite for Chemists, new and second-hand; extensive stock to select from, at extremely low prices; practical men sent to all parts; estimates free. Matthews, Chemists' Fitter, 14 & 16 Manchester Street, Liverpool; Works: 9 Preston Street. Telephone 6695.

SHOP-FITTINGS.—Through enlargement of premises and consequent extensive alterations the entire stock will be greatly reduced to save expense of removal. 5,000 drug-drawers, mahogany fronts, glass labels and knobs, with lockers, shelving, pilasters and cornices complete; 62-wall show-cases, every length from 2 to 18 ft. long; 38 mahogany serving-counters with plate-glass fronts, from 5 to 14 ft. long; 30 dispensing-screens, every size from 5 to 8 ft. long, every style; 12 sponge-cases; 29 perfume-cases and desks; 81 counter-cases, from 2 ft. 6 in. to 10 ft. long, bent or square fronts, and of varying widths; 39 nests of counter-drawers, from 2 ft. to 6 ft. long; 8 block show-cases; 6 plate-glass block counters, from 4 to 8 ft. long; an enormous quantity of plate-glass shelving for windows, mirrors, bottles, ungt.-jars, carboys, specie-jars, sundries, &c. Immediate delivery and greatly reduced prices. Philip Josephs & Son, 54, 68 & 93 Old Street, Loudon, E.C.

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APPARATUS.

8 pairs forceps, by Collins, Everard & Dixon. SUMMERS, Chemist, Norton Folgate.

Hammond typewriter, No. 2, ideal keyboard, for sale, condition as new; cost me £22 net, price £15 lowest. S. LONGFIELD, Great Missenden. Aerated-water plant, complete, in thorough working order, for hand or power; turn out 300 doz. daily; £20, a bargain. WHYTE, Chemist, Elgin.

Case of obstetric instruments (fig. 198, Maw), obstetric forceps (fig. 212), Ocock's bladder-trocars in case (fig. 173), nearly new; offers wanted. LAST, Wolsey Road, Teddington.

BOOKS AND PERIODICALS.

What cash offers for *Pharmaceutical Journal*, posted Tuesdays? A. E., 213 High Street, Poole.

"C. & D." cum Diaries, from 1892 to 1898 inclusive, 10s. 6d., carriage forward. COUSINS, Buckfastleigh, Devon.

"C. & D.," March 1893 to March 1899 inclusive; what offers? J. M. ALDWINKLE, 44 St. Stephen's Road, Leicester.

"Encyclopædia Edinensis," 1826, 6 volumes, good condition; what offers? A. MASON, London Street, Faringdon.

£5, very valuable and rare, Chambers' "Dictionary," date 1743, 2 immense volumes, complete, excellent condition. LEA, 9 Lady's Lane, Northampton.

"The Chemist and Druggist" for June, 1894, to September, 1898; what offers? also Squire's "Companion to the B.P.," 16th edit., almost new. 58/6, Office of this Paper.

DRUGS AND CHEMICALS.

Influenza! Influenza! remarkable cures, female pills, physician's experience, recipes 2s. 6d. free. "CHEMIST," 9 Lady's Lane, Northampton.

About 400 stock-bottles homeopathic pills in 9 boxes, stock of the late Mr. H. Turner, of Norwood, for sale at 2d. per bottle, or nearest offer. A. STEWARD, Homeopathic Chemist, Sydenham, S.E.

Choice Welsh honey, 40 to 50 lbs., 7½d.; morphia, 5s. 3d., 8 oz. 4s. 6d.; 100 oz. Howards' quinine, 1s. 4d., 25 oz. 1s. 5d.; pot. iodide, 11s., 6 lbs. 10s. 6d.; cash. WILLIAMS, Holyhead.

Potass. iodidi, 9s. 6d. 4 lbs. 36s.; bi-muth subcarb., 5s. 3d. 1b., 4 lbs. 20s.; cocaine hydroch., 10s. 6d. oz.; ½-oz. Howards' citrate iron and quinine, 3s. doz., ½-oz. 5s.; iodiform precip. and crystal, 13s. 1b.; swadown-powder, 9s. 3 doz.; Stedman's powders, 12s. 2 doz.; 5 doz. Munyon at 7s. 6d. doz.; 6 Oelandine, 4s.; cash with order fresh customers; offers wanted for 18 2s. 9d. Kearsley-Welch's pills, 1 oz. ambergris, 2 lbs. iodum resublimed, and 1½ lb. gum opii opt. EASTMAN, Forest Lane, Stratford.

FORMULÆ.

Toilet-Cream formula for hair, whiskers, and moustache; post ree. 58/36, Office of this Paper.

Etherised eau de lavande with otto, guaranteed exquisite fragrance, triple strength; 2s. 6d. ALDRIDGE, 11 Esher Street, Westminster, S.W.

Inseparable aromatised cod-liver oil emulsion, with or without hypophosphites, 50% oil; full directions, 2s. 6d. ALDRIDGE, 11 Esher Street, Westminster, S.W.

A practical brewer offers cheap his practical working formula for brewing hop-bitters under 2 per cent. proof spirit from malt and hops, not sugar and hops, as usually the case; the beverage brewed in this way is far superior to the general hop-bitters sold, having a decided malt flavour. Apply, "BREWIST" (61/14), Office of this Paper.

PROPRIETARY ARTICLES.

Wilson's food, 5½ doz., clean; what offers? 64 Charles Street, Hull.

What offers? 12 1s. 1½d. Rudd's remedy. BUNKER, 135 Great Dover Street, S.E.

Daisy headache-powders, several gross 7½d. and 1s. 1½d., half face-value. WHYTE, Elgin.

20 doz. Daisy powders, 8s. doz., paid; whole or part; cash only. 56/28, Office of this Paper.

What offers? 4 doz. 1s. ovaline soap; ½ doz. 1-oz. Lundborg's perfumes (assorted). 57/31, Office of this Paper.

Overstocked.—What offers? 2 doz. 2s. 6d. Mellin's emulsion; 10 11s. bottles Horlick's malted milk. 57/36, Office of this Paper.

Dr. Williams' pink pills, 30 doz., unopened, 23s. 8d. per doz., post free; cash with order. HARRIES' DRUG STORES, Milford Haven.

Two bevril, 1 lb.; 5 Eno's moto; 3 Allcock's corn-plasters; 3 Lavau's linctus; 1 Mellin's biscuits; 3 Benger's food, 2s. 6d.; offers wanted; Greenwood's chimney-cleaners, 6d., 3s. doz., 6-dozen lots carriage paid. 60/29, Office of this Paper.

OPTICAL AND PHOTOGRAPHIC.

Eastman's No. 3 folding kodak film-holder, very little used, good condition; what offers? WARDMAN, 8 Upper Well Street, Coventry. Beck's bacteriological microscope, new, in walnut case, ½-in. and ¼-in. object-glasses, &c.; original price £8, price £5. 58/35, Office of this Paper.

SHOP FITTINGS.

Counter-case, 4 ft. long, returning 2 ft., 2 ft. 4 in. high, suitable for dispensing-screen. TWEEN, Bushey Heath.

Handsome square ruby lamp, 16 in., straight bracket, fittings complete, 25s. on rail; 4 4-gall. carboys, 4s. each. FERRYMAN, Chemist, Southampton.

Show-jar, 27 in. high, glass cover, labelled Magnesia, as Maw's, fig 23, £5 2s., accept £3; excellent condition; part exchange entertained. GOLDWELL & Co., Chemists, Southend-on-Sea.

MISCELLANEOUS.

200 1-gall. tins, contained perfumed spirit, quite clean, for sale; London. 58/22, Office of this Paper.

One Ovalval share; *Ph. Journal*, posted Mondays; offers. ALLEN, Chemist, Hyde Road, Gorton.

Stokes' check-tilt, perfect order, 25s., including 3 doz. paper rolls. ANTHONY, Chemist, Bedford.

Water-bed, 72 by 36, cost 7 guineas (Ferris) 2 years ago; been used twice, 6 weeks each. Offers to GATEWARD & WRIGHT, Yeovil.

Southall's materia-medica cabinet, series D, good as new; cost 55s. will sell for 37s. 6d. T. M. WATSON, 91 Gooch Street, Birmingham.

Pill-machine (24), 5-grain, 4 feet, Maw's fig. 7; counter-case; both in really first-class condition; what offers? SURFLEET, Chemist, Aylesbury.

50 Tibble's vi-cocoa shares, 6 per cent. preference, price 17s. each; 100 Seigel ordinary, paying 10 per cent., price 15s. 6d. each. A., 12 Eltham Road, Lee, S.E.

Watson's aplanatic magnifier, 20 diameters, 8s. 6d., cost 14s. 6d.; Pringle's "Photo-Micrography" (new), 3s. 3d. M., 31 Lansdowne Road, Walthamstow.

A bargain.—12s. 6d. Ashton & Parsons' homeopathic case, containing medicines realise when sold 44s.; Hooper's "Physician's Vade-Mecum," 6s. "CHEMIST," 9 Lady's Lane, Northampton.

Water-bed, in perfect condition, 6 ft. by 3 ft.; water-cushion, in perfect condition, 2 ft. by 1½ ft.; also waterproof sheet, 6½ ft. by 3 ft. Offers to J. R. NICHOLLS, Auctioneer, &c., Church Street, Falmouth.

100 reams of white paper, suitable for wrapping purposes, 33 by 33½ in., 56 lbs. per ream (516 sheets), at 11s. 3d. per ream, carriage paid; sample sheet on application. Not less than 1 ream sold, and cash with order to Publisher of this Paper.

WANTED.

Outside-gilt mortar; check-tilt. 59/20, Office of this Paper.

Four 1-gall. carboys. State lowest price, LONG, 26 Stamford Hill, N.

2-grain pill-machine, in good condition. GREEN, Chemist, Southborough.

Three 6-gall. carboys, pear-shape, with stands, cheap. WATTS, Darnall, Sheffield.

"The Chemist and Druggist" for February 11, 1899. S. B., Office of this Paper.

Old electric lamps and scrap platinum. P. ROWSELL, 9 Derwent Grove, East Dulwich, London.

Good ½-plate camera, with 3 double slides, Wray, Ross or Dalmeyr lens. MARTIN, Chemist, Helston.

Wall-case, glass doors, 8 ft. by 3 ft. 6 in., 1 ft. wide; for drug room; must be cheap. NEWTON, Yeovil.

"Guide to the Preliminary Pharmaceutical Examination" State price, SWALES, 23 Lowgate, Hull.

Pottle shop-bottles, cash, or exchange shop-fittings, case, pill-machines. "CHEMIST," 375 Barking Road, London, E.

Two No. 10 or 12 Wedgwood mortars, not pestles; must be sound. State lowest price delivered, YEATES, Stourbridge.

Green's "Botany," Newyth's "Chemistry," Peirera's "Selecta," and Pharmacopœia. SPENCER, 41 Royal Park Road, Leeds.

One 15-gr. suppository-mould, for 6, and small counter-scales, with set of weights, ½ oz. to 2 lbs. W. J. HEALY, Pharmacist, Kilmallock.

Eight or 10 ft. range of drawers, glass knobs, mahogany fronted, labelled; must be cheap. State price, EDWARDS, 192 Cowbridge Road, Cardiff.

3½ doz. 20-oz. N.M. shop-rounds; 3½ doz. 16-oz. W.M. ditto; 4 doz. 10-oz. N.M. ditto; 2 doz. 5-oz. N.M. ditto; 2 doz. 5-oz. W.M. ditto; 1 doz. 10-oz. ext.-pots, 1 doz. 4-lb. ointment-pots, lilac, pink, blue; 1 doz. lozenge-jars, 2-lb.; all labelled, in good condition; 9 ft. run drug-drawers, mahogany fronts, glass labels and knobs, with locker and shelving; dispensing-screen, with side-glass cases, about 3½ to 4 ft. Quote lowest price to FOSS, 5 Angel Street, Worcester.

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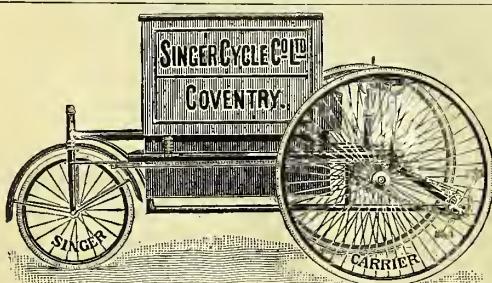
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**1/4 per Gal.      50 Gals., 1/2      500 Gals., 1/- <sup>per Gal.</sup>**

40-Gallon Casks Free; 5-Gallon Drums, 3/- each.

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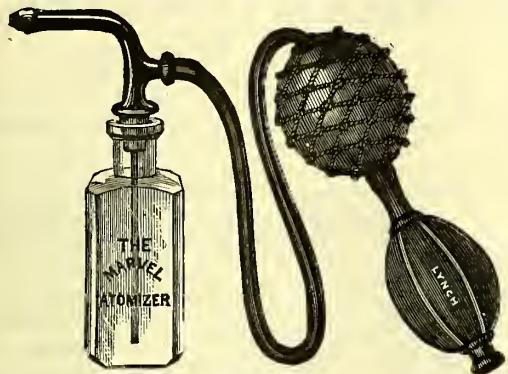
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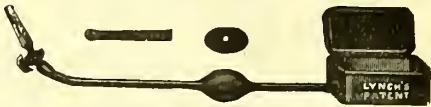


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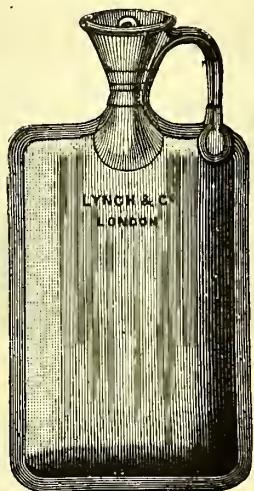
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The above illustration represents an Enema which is arranged so that the box will form the reservoir for the fluid to be injected. By being used in this way any possibility of injecting air is avoided, owing to the fact that the suction end of Enema is screwed into bottom of reservoir. It is light and portable, and most suitable for travelling. The Enema is made of the finest quality rubber in one continuous length, and will last for many years with ordinary usage; it is also fitted with our patent non-corrosive glass valves. The reservoir which forms the box is made of iron, enamelled inside and out.

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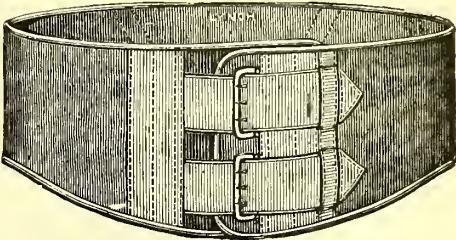
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PHARMACEUTICAL JOURNAL, Feb. 25, 1899.

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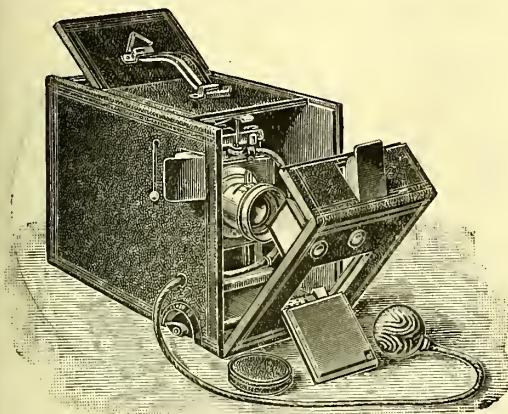


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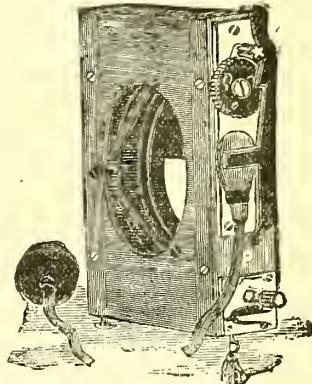
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Brefills, Lim.

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## CONCENT. LIQUORS

Baiss Bros. & Co.  
Fletcher, Fletcher & Co.  
Lloyd, T. Howard, & Co.  
Robinson B.

## CONFECTORY

Dunhill & Co.  
Gibson & Sons  
Guest, T., & Co.  
Hillbays, Lim.

## CORKS

Ayrton & Saunders  
Clark Co., Lim.  
Ellis, W., & Co.  
Ringrose & Cobb

## CORN CURES

Gardner, C. Potter & Clarke  
Solport Bros.

## CRUSHED LINSEED

Mumford, G. S.  
Neil, R. & J.

## DENTIFRICES, &amp;c.

Beecham, T.  
Beetham, T., & Son  
Hovenden & Sons  
Jewbury & Brown  
Mason, C. E., & Co.  
Oilpeart, Co.  
Stevens, P. A.  
Sutton, O., & Co.  
Woods, W. (Areca Nut)

## DENTISTRY

Barker, F. H.  
Fentiman, A. G.  
Fentiman, A. J., & Co.  
Spencer & Son

## DISINFECTANTS

Allison, Johnson & Foster, Lim.  
Calvert, F. C., & Co.  
Chinosol Hygienic Co., Lim.  
Dussek Bros.  
Fletcher Bros. & Co.  
Formalin Hygienic Co., Lim.  
Heben, W. C.  
Joyes Sanitary Compounds Co.  
Kirk, B., Lim.  
Kith, B. (Chinosol, Kreschino)  
Mackay, Mackay & Co.  
Major & Co., Lim.  
May & Baker, Lim.  
Sanitas Co., Lim.  
Steele, J. C., & Co.  
Tomlinson & Hayward  
Tyler, T., & Co., Lim.  
United Alkali Co., Lim.

## DOG MEDICINES

Lloyd, T. Howard, & Co.  
Spratt's Patent, Lim.

## DRUGGISTS' SUNDERS.

Ayrton & Saunders  
Barclay & Son, Lim.  
Bennett, H. S.  
Bleasdale & Co., Lim.  
Burke, Warren & Ridley  
Dallley & Wilkinson  
Dent, C. S., & Co.  
Edgar's Croup Lotion, Lim.  
Evans, Sons & Co.  
Evans, Sons & Co. (Savars)  
Fordham, W. B., & Sons, Lim.  
Gillespie & Co.  
Hovenden & Sons  
Kirk, B., Lim.  
"Leaf" Brand Hat Reviver  
Lorimer & Moyes  
Marshalls, Lim.  
Maw, S., Son, & Thompson  
May, Roberts & Co.  
Newberry, F., & Sons  
Parozone Co., Lim.  
Quelch, H. C.  
Roberts & Sheppay  
Sanger & Sons | Schutze & Co.  
Smith, John H., & Co.  
Sobey, W. B., & Sons  
Southall Bros. & Barclay  
Tidman & Son | Toogood, W.  
Wood, Vincent  
Woolf, E.

## DRUG GRINDERS

Allen, S., & Sons  
Neil, R. & J., & Co., Lim.

## DRUGS

Bleasdale & Co., Lim.  
Loftus & Schutze  
Love, H. F., & Co.  
Neil, R. & J., & Co., Lim. (and  
Spices)

Oppenheimer, Son & Co.

Stevenson, H. E., & Co.

Wyley's, Lim.

## DYES

Crawshaw, E., & Co.  
Item Household Dye Co.

## EAU DE COLOGNE

Farina, J. M.  
Sainsbury, S.  
Van Open & Co.

## EMBROCATION

Day & Sons  
Elliman, Sons & Co.  
Harvey & Co.

Post, A. M., Lim.

Sanitas Co., Lim.

## ENEM'S

Barclay & Sons, Lim.  
Evans, Sons & Co.

Lynch & Co., Lim.

Sanger & Son | Wood, Vincent

Woolley, J., Sons & Co., Lim.

## ESSENCES

Allen & Hanburys, Lim.  
Barnett & Foster  
Burgoynes, Burbidges & Co.  
Dale, J. & Co.  
Fletcher, Fletcher & Co.  
Goodall, Backhouse & Co.  
May & Baker, Lim.  
Newball & Mason  
Stevenson & Howell  
Wocley, Sons & Co.

## ESSENTIAL OILS

Allen, S., & Sons  
Barnett & Foster  
Burke, W. & Co.  
Essential Oil Importers and  
Exporters, Lim.  
Evans, Sons & Co.  
Jenocard, Gazan & Doumin  
London Essence Co.  
May & Baker, Lim.  
Popplereuter, W.  
Ransom, Wm., & Sons  
Sachsen, E., & Co.  
Scholes, Colman  
Secto & Co.  
Spurway & Cie.  
Stevenson, H. E., & Co.  
Stevenson & Howell  
Treatt, R. C. | Warrick Bros.  
Wilkinson & Simpson, Lim.  
Wright, Leyman & Umney

## ETHER

Dunhill, Flockhart & Co.  
Howards & Sons  
Macfarlan, J. F., & Co.  
May & Baker, Lim.  
Tyler, T., & Co.  
White, A., & Sons

## EUCALYPTUS OIL

Drysdale, J. W., & Co.  
Sanitas Co., Lim.  
Sharland & Co.  
Tasmanian Eucalyptus Oil Co.

## EXTRACT MEAT

Armour & Co. | Brand & Co.  
Beaufoy & Co.  
Liebig Co.

## EXTRACTS, FLUID

Allen & Hanburys  
Allen, G., & Co.  
Blaesdale & Co., Lim.  
Burgoynes, Burbidges & Co.  
Evans, Sons & Co.  
Fletcher, Fletcher & Co.  
Hearon, Squire & Francis  
Lloyd, T. Howard, & Co.  
Parke, Davis & Co.  
Potter & Clarke  
Ransom, W., & Son  
Wilkinson & Simpson, Lim.  
Wright, Leyman & Umney

## EXTRACTS, SOLID

Allen, G., & Co.  
Ransom, W., & Son

## EXTRACTS, VEGTIBLE.

Fromma Extract Co.

## FEEDING BOTTLES

Barclay & Sons, Lim.  
Evans, Sons & Co.  
Gilbert, H., & Sons  
Hovenden & Sons  
King, B., & Sons

Lynch & Co., Lim.

Mariott, E., & Co.

Maw, S., Son & Thompson

May, Roberts & Co.

Youldon, E.

## FILTERS

Berkfield Filter Co., Lim.  
Mawson Filter Co.

## FLY CATCHERS

Alastabine Co. (British), Lim.  
Ford, Shapland & Co.  
Marshall's, Lim.  
Mather, W., Lim.  
Smith, J. H., & Co.  
Strong, Christy  
Tunbridge & Wright

## FOOD (Infants' &amp; Invalids')

Allen & Hanburys

Beanes, E., & Co.

Bender's Food

Bleasdale & Co., Lim.

Bovril, Lim. | Brand & Co.

Burgoynes, Burbidges & Co.

Coomb's Flour Co., Lim.

Frame Food Co.

Fried Extract Co.

Goodall, Backhouse & Co.

Hearon, Squire & Francis

Liebig Co.

Mellin's Food

Milk Wine Co., Lim.

Nestlé, H.

Savory & Moore

Vi-Cocoa (Dr. Tibbles')

## FOOD (for Plants)

Sharon Chemical Co., Lim.

## GELATINES

Meggett, Saml., & Sons, Lim.

## GLUE

Barclay & Sons, Lim.

Brauer, A.

## GRANULAR PREP.

Blash, A., & Sons

Evans, Gadd & Co.

Evans, Sons & Co.

Hearon, Squire & Francis

Lloyd, T. Howard & Co.

Lofthouse & Saltmer

Tyler, T., & Co., Lim.

Wright, Leyman & Umney

## HONEY

Allen & Hanburys

Barnett & Foster

Burgoynes, Burbidges & Co.

Day, Son & Hewitt

Veterinary Day & Sons (Veterinary)

Day & Sons (Vetinary)

## SCHOOLS, &amp;c.

Central (Edinburgh)  
Davis, F.  
Glasgow and West of Scotland School (T. S. Barrie)  
Gordon's (Robt.) School  
Laurence, L. (Optical)  
London Royal Pharmacy  
Liverpool School of Pharmacy  
Manchester Col. of Pharmacy  
Metropolitan Col. of Pharmacy  
North of England School  
Northern College of Pharmacy  
Queensborough College  
Royal Dispensary (Edinburgh)  
South London School of Pharmacy, Lim.  
Westminster College

## SEIDLITZ POWDERS

Hora & Co. | May, Roberts & Co.

## SELTZOGENES

May, Roberts & Co.

Theissler, E.

## SERUM

Greef, R. W., & Co.

## SHAVING

Hovenden & Sons (Euxesls)  
Lloyd, A., & Co. (A. S. Lloyd's  
Euxesis)

## SHEEP DIP

Fletcher Bros. & Co.  
Jeyes' Sanitary Compounds Co.  
Sanitas Co., Lim.

## SHOP FITTERS

Astrom, C.  
Ayrton & Saunders

Boddy & Goyier

Bogart, J. & W.

Ellison, F. E., & Co.

Evans, Sons & Co.

Josephs, Phillip, & Son

Maw, S., Son & Thompson

Mitchell, A.

Parnall & Sons, Lim.

Treble, G., & Son

Yates, W. B.

## SIZE

Megett, S., & Sons, Lim.

## SPECTACLES, &amp;c.

Bowright & Grey

Darton, F., & Co.

Leicester, L.

Bapst, J. & Co.

Worshipful Company of Spectacle Makers

## SPONGES

Cohen, I. & M.

Cresswell Bros. & Schmits

Peterson, M., & Co.

## SOAP

Allen & Hanzburs, Lim.  
Ayrton & Saunders  
Bartlett, T., & Son  
Bronson, F., & Co.  
Calvert, F. G., & Co.  
Cook, E., & Co.  
Cutter & Co.  
Crossfield, J., & Sons, Lim.  
Gibbs, D. & W. (Medicated)

Hydroxene Co.  
Jeyes' Sanitary Compounds Co.

Mackenzie's, Dr. (Arsenical)

Maypole Soap Co., Lim.

Peacock's Ovaline Soap Co., Lim.

Pearl, A. & F., Lim.

Shaw, G., & Co., Lim.

Sharon Chemical Co., Lim.

sharp Bros. Soap, &c., Co., Ltd.

Sinclair, J., & Son

Tidman & Son

Vinolia Co., Lim.

Wright, Layman & Umney

STARCH

Ortchley, T. (Gloss)

Hebden, W. C. (Gloss)

STOPPERS

Anstis & Co. (Sprinklers)

Barnett & Foster | Melin, C.

Patent Stopper, Box, and

Stamping Co., Lim.

Stopendum Stopper Co., Lim.

STOVES

Clark, S., & Co., Lim.

SUGAR

Macfie & Sons

SURGICAL

Bailey, W. H., & Son

Bailey, W. H., & Son

Burgoyne, Burges & Co.

Domen Beits Co.

Eschmann Bros. & Walsh

Ferris & Co.

Galen Manufacturing Co., Lim.

Hatrich, J. L., & Co., Lim.

Haywood, J. H.

Krohne & Sesemann

Liverpool Patent Lint Co.

Lynch & Co., Lim.

Macfarlane, J. F., & Co.

Mitton, R.

Matto, Lim.

Maw, S., Son & Thompson

Oppenheimer, Son & Co., Lim.

Powell & Barstow

Quelch, H. C.

Robinson & Sons

Sanitary Wood Wool Co., Lim.

Schutze, F., & Co.

Wilkinson & Co.

Wood, Vincent

Woodruff, T.

## SYPHONS

Barnett & Foster  
British Syphon Co.  
Chemists Aerated and Mineral  
Water Association, Lim.

Gentleman & Co.

Iris & Co., Lim.

Kilner Bros. | Melin, C.

Quelch & Sons, Lim.

Dee Oil Co., Lim.

Hovenden & Sons

Beetham & Son

Burrroughs, Wellcome & Co.

(Lancashire)

Corbridge & Sons, Lim.

Dee Oil Co., Lim.

Hovenden & Sons

Lynch & Co., Lim.

Major & Co., Lim.

Marshall's, Lim.

Maw, S., Son & Thompson

Peacock's Ovaline Soap Co., Lim.

Queich, H. C.

Reed & Sons

Sharp Bros. Soap & Perfumery Co., Lim.

Solport Bros.

Southall Bros. & Barclay

Squire & Sons

Tidman & Son, Lim.

Townsend, J. (Paper)

Vinolia Co., Lim.

Wright, Layman & Umney

Wyleys, Lim.

TOILET

Allen & Hanzburs, Lim.  
Ayrton & Saunders

Barker, F., & Son

Beetham & Son

Burrroughs, Wellcome & Co.

(Lancashire)

Corbridge & Sons, Lim.

Dee Oil Co., Lim.

Hovenden & Sons

Lynch & Co., Lim.

Major & Co., Lim.

Marshall's, Lim.

Maw, S., Son & Thompson

Peacock's Ovaline Soap Co., Lim.

Queich, H. C.

Reed & Sons

Sharp Bros. Soap & Perfumery Co., Lim.

Solport Bros.

Southall Bros. & Barclay

Squire & Sons

Tidman & Son, Lim.

Townsend, J. (Paper)

Vinolia Co., Lim.

Wright, Layman & Umney

Wyleys, Lim.

WEED KILLER

Acme Chemical Co., Lim.

Fletcher Bros. & Co.

Killet's Chemical Co.

North of Ireland Chemical Co.

Sanitas Co., Lim.

Tomlinson & Hayward

## WHOLESALE &amp; EXPT DRUGGISTS

Allen & Hanburs

Allen, S., & Son | Baliss' Bros.

Barron & Haynes & Co.

Bleasdale & Co.

Brown & Biddle & Co.

Bush, W. J., & Co.

Corbyn, Stacey & Co.

Davies, Gibbins & Co.

Davy, Hill & Son, Yates & Hicks

Evans, Gadd & Co.

Evans, Sons & Co.

Evans, Leescher & Webb

Ferris & Co. | Graf, F.

Goodall, Backhouse & Co.

Harker, Stagg & Morgan

Hewlett & Son

Kemp, Wm., & Son

Lloyd, T. Howard, & Co

Loftthouse & Saitter

London Essence Co.

Macfarlan, J. F., & Co.

Potter & Clarke

Raines, Clark & Co.

Smith, B. A., & Co.

Stevenson, H. E., & Co.

Taylor & Oldrids

Willow, Francis, Butl & Co.

Ayscough Thompson

Woolley, Jas., Sons & Co.

Wright, Layman & Umney

Wyleys, Lim.

## WINES, SPIRITS, BEER, &amp;c.

Beaupoy & Co.

Bowen & McKechnie

Burrrough, J.

Clark, J.

Coleman & Co. Lim.

French & English Society

Goddall, Backhouse & Co.

Holloway's Wine Co., Lim.

Miller, A., & Co. (Orange)

Phillips, G., & Co.

Robinson, B. (Orange)

Smith, S., & Co. (Lim. (Orange)

Stevenson, H. E., & Co.

Symons, J., & Co., Lim.

Wilcox & Co., Lim.

Wright, Layman & Umney

Wyleys, Lim.

WM. R. WARNER & CO., PHARMACEUTICAL CHEMISTS.

Sixteen International Prize Medals Awarded.

BROMO SODA TRADE MARK.

COATED PILLS TRADE MARK.

INGLUVIN TRADE MARK.

The essential principle of the gizzard, and bearing the same relation to poultry that pepsin does to the higher animals. Where pepsin refuses to act, and where, in severe cases, it has even been rejected by the stomach, Ingluvin has rapidly effected relief. Per oz. Bottle (stamped), 4/6. Supplied unstamped, and in 4-oz. bottles (also in lentiforms) for Dispensing.

[3]

British Depot—F. NEWBERRY & SONS (Established over 150 years).  
1 & 3 KING EDWARD STREET, NEWGATE STREET, LONDON, E.C.

Complete Catalogue, with Formulae, free on demand. Newberry's Annual Catalogues also contain full Details of these Preparations.

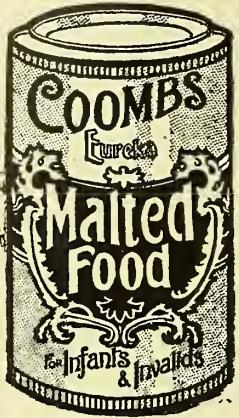
**IT WILL PAY YOU TO PUSH  
COOMBS'  
MALTED FOOD**

for Infants and Invalids.

AWARDS.

**2**

GOLD  
MEDALS.



Recom-  
mended  
by the  
Medical  
Faculty  
and  
Leading  
Analysts.

*See  
Drs. Goodfellow's  
and  
Granville H.  
Sharpe's  
Reports.*

Bears a good profit, and is only supplied to those who agree to sell at full advertised prices.

TERMS ON APPLICATION.

**COOMBS' "EUREKA" AERATED FLOUR CO., LTD.**

Lenton Boulevard, Nottingham, & 8 & 8a Farringdon Road, London, E.C.

**"FROMMS"  
FOOD SPECIALITIES.**

For Price Lists, Show Cards, &c.,  
apply to

**FROMMS EXTRACT CO., LTD.**  
5 WHITE STREET, MOORFIELDS, E.C.

CONCENTRATED  
**SOLUBLE ESSENCE OF LEMON**  
FOR  
Aerated Waters, Cordials, Syrups, &c.

Our position as Importers of large quantities of Lemons enables us to select fruit coming from districts that we have found from experience will produce the best results. We are, therefore, enabled to make a Superfine Essence of uniform character, which retains as nearly as possible the natural flavour and delicate aroma of the fresh fruit.

It is economical in use, being concentrated to the fullest extent; 1 oz will flavour 1 gallon of Syrup, &c.

**Per lb., Duty Paid, 4/3. Per lb., in Bond, 2/9.**

Sample and General Price List of Essences, Syrups, Cordials, Lemon and Orange Squashes, Citrate, &c., free on application.

**CHAS. SOUTHWELL & CO.,**  
Compounders of Spirits, &c., DOCKHEAD, LONDON.

**CAUTION !**

**"YORKSHIRE RELISH."**

IN THE HIGH COURT OF JUSTICE  
CHANCERY DIVISION.

WILLIAM POWELL (trading as Goodall, Backhouse & Co.)  
v.  
**MAY & CO.**

NOTICE is hereby given that on the 24th day of February, 1899, the Hon. Mr. JUSTICE KEKEWICH ordered that the Defendants their servants and agents be restrained until judgment in this Action or further order from in any manner using or applying the words "YORKSHIRE SAUCE" or "YORKSHIRE RELISH" as descriptive of or in connection with or in respect of any Sauce or Relish manufactured by them or not manufactured by the Plaintiff without clearly distinguishing such Sauce or Relish from the Sauce or Relish of the Plaintiff And from describing any such Sauce or Relish as aforesaid as "THE ORIGINAL YORKSHIRE" SAUCE OR RELISH and from selling or offering or exposing or advertising for sale or procuring to be sold any such Sauce or Relish as aforesaid under labels or wrappers or enclosures or otherwise to be calculated to represent or lead to the belief that such Sauce or Relish is the Sauce or Relish of the Plaintiff and from selling or supplying any such Sauce or Relish as aforesaid in response to orders for "YORKSHIRE RELISH" or for the Sauce or Relish of the Plaintiff and from in any manner aforesaid or in any other manner passing off or enabling or assisting others to pass off any such Sauce or Relish as aforesaid as or for the Sauce or Relish of the Plaintiff.

Dated this 9th day of March, 1899.

J. SEYMOUR SALAMAN,  
65 & 66 Chancery Lane, London,  
Solicitor for  
Messrs. GOODALL, BACKHOUSE & CO.,  
Leeds, Yorkshire.

BOVRIL

# CASH BONUS

To Retail Grocers, Chemists, and Allied Trades  
in the United Kingdom.

Messrs. BOVRIL, LIMITED, have pleasure in announcing the following Bonus Scheme for the month of March, 1899.

**NATURE OF THE BONUS.**—The Bonus will be **Five** per cent. (5%) in **Cash** on the Aggregate amount of all Orders sent to the Company direct or to the Wholesale Houses during the **month of March**, and it will be allowed on all Goods appearing on the Company's Current Price List except Bovril Bottlets (2½d. size).

**HOW AND WHEN THE BONUS WILL BE PAID.**—The Bonus will be paid by **Bank Cheque** to be issued from the Company's Head Office immediately the amount due to the Customer has been ascertained and the Company is reasonably satisfied that the undermentioned conditions have been complied with.

**The Bonus must not be deducted when payment for Goods is made**, but must be considered a separate transaction, and, as already stated, will be paid by cheque.

## Conditions to be complied with.

- 1.—The Customer shall not cut below recognised minimum prices.
- 2.—The Customer shall display a Bovril Window Bill in a prominent position on each of the Street Floor Windows of all his Business Premises for at least four consecutive weeks, between 1st March and 30th April, 1899.
- 3.—The Customer shall make prompt payment of accounts according to the Ordinary Trade Terms as specified on slip attached to Invoice.

## What to do if you wish to participate.

- 1.—Fill up the Card sent you, stamp it, and return it immediately, when the number of Window Bills you apply for will be forwarded.
- 2.—On receipt of Window Bills notify on the postcard which shall accompany the Bills the date when your Windows will be "billed," ready for inspection by the Company's representative.

## To Customers ordering through Wholesale Houses.

N.B.—To avoid the great labour that would fall upon the Wholesalers if they had to keep a separate account for every customer, the Retailer is asked to keep an account of all purchases of the Company's Goods, except Bottlets (on which Bonus is not allowed) made during the month of March, forward the account (as his claim for the Bonus) to the Wholesalers from whom the purchases were made, as soon after the close of the month as possible. Suitable forms are supplied for the purpose, and will be forwarded on application either to the Wholesalers, or to

**BOVRIL, LIMITED, 30 Farringdon St., LONDON,**  
Or their BRANCHES in

ENGLAND—Manchester, Leeds, Birmingham, Liverpool, Newcastle-on-Tyne, Hull, Sheffield, Bristol.  
SCOTLAND—Edinburgh, Glasgow. IRELAND—Dublin, Belfast.

"Undoubted Purity and Strength."—*Medical Magazine.*  
 "In the Front Rank of really valuable Foods."—*Lancet.*



Favoured by the Homes & Hospitals  
of Great Britain.

## L'EAU D'OREZZA.

This remarkably fine Tonic Mineral Water issues from a spring 1,968 feet above sea level at Orezza, in the Island of Corsica.

It was known and used in France during the last century, but came prominently under the notice of the Medical Profession in that country in the year 1853 through a report published by the Academy of Medicine of Paris of an analysis by a renowned Professor of Chemistry, Dr. Poggiale, confirmed by Mons. Ossian Henri.

Since then the water has been extensively used in France and her Colonies and in Egypt and South America, as well as in Spain and other European countries, and is considered to be the best of all Mineral Waters in cases of Anæmia, Chlorosis, Leucorrhœa, and all diseases arising from impoverishment of the blood, and has been found of the utmost value in Gastralgia, Dyspepsia, and affections of the Liver and Spleen caused by residence in tropical climates, and in Debility after long illness, and in Intermittent Fever.

It is certified to contain:—

|                                |                       |                      |
|--------------------------------|-----------------------|----------------------|
| IRON, Carbonate and Protoxide. | MAGNESIUM, Carbonate. | POTASSIUM, Chloride. |
| SODIUM, Carbonate.             | CALCIUM, Carbonate.   | SODIUM, Chloride.    |

Traces of Manganese and Arsenious Acid, and has sufficient "free" Carbonic Acid to cause it to effervesce on being poured into a tumbler.

It is the most palatable and digestible of all strong ferruginous waters, and with the addition of a little Lime Juice or Lemon Syrup makes a pleasant table beverage.

Wholesale Orders for France and her Colonies to be sent to:—3 RUE ROSSINI, PARIS,  
And Orders for all other Countries to be sent to

**MARK WHITWILL, SON & JUDGE,**  
**6 ST. HELEN'S PLACE, LONDON.**

THE MOST ECONOMIC, CONVENIENT, & PORTABLE FORM OF SOUP.

# LAZENBY'S SOUP SQUARES

(MULLIGATAWNY, GRAVY, JULIENNE, ETC.)

ONE  
6.  
D.  
SQUARE

WILL MAKE A  
PINT & A HALF  
OF STRONG  
NUTRITIOUS SOUP

*Prepared by E. LAZENBY & SON, LTD 18, Trinity St., LONDON, S.E.*

SOLD BY GROCERS, STORES, ETC.

## 'THE BUSY MOTHER INFANTS' FOOD'

A TRUE and COMPLETE FOOD for Infants and Invalids, in which all requisite nutrient properties are so blended as to be partially self-digestive, thus imparting the MAXIMUM of nourishment to the system, at a MINIMUM of digestive effort.

"A PERFECT FOOD."

*Dr. A. B. Griffiths, F.R.S. (Edin.), F.C.S.*

SOLD IN 1-lb. TINS AT 1/- EACH.

WHOLESALE—1 dozen, 8/6; 3 dozen, 24/-; 1 gross, 84/-. BULK, 45/- cwt. net, Carriage Paid. Cash or references from new customers.

**BLEASDALE, LIMITED, YORK.**

## THOS. GUEST & CO.

**Carruthers Street, MANCHESTER.**

MAKERS OF MEDICATED LOZENGES AND JUJUBES.

B.P., T.H. Ph., and General Proprietary Lozenges. Decorated Tin Cartons of 2 and 4 lbs. Linseed, Licorice and Chlorodyne—a Speciality. Finest Gum Jujubes and Pastilles—Glycerine and Black Currant, &c. Granular and all Effervescing Preparations. Boiled Sugars, Floral Tablets.

SEND FOR LIST, SAMPLES, AND COMPARE.  
TELEPHONE 285. TELEGRAMS "GUESTO."

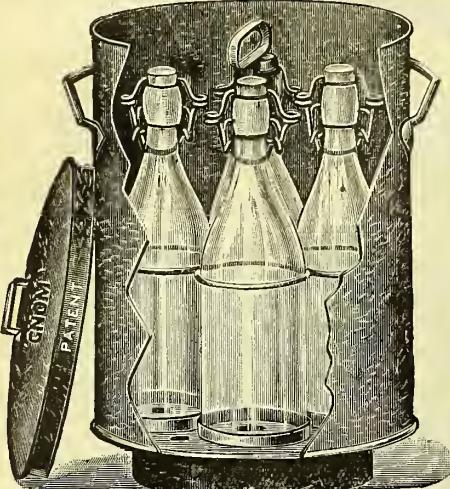
MILK IS DANGEROUS! UNLESS YOU STERILIZE IT.

Every Household should Use

**THE "GNOM" PATENT  
Domestic Sterilizer**

The great feature of this patent process of sterilization is that immediately the milk is placed in the bottle the stopper is closed—even during the sterilizing process—and must never be opened until the milk is required for use, thus rendering sterilization practically automatic. This is achieved by the patent stopper, the spring of which rises to release the pressure during sterilization, and automatically closes immediately the pressure is relieved.

SIMPLE, EFFECTIVE, and does not affect the  
GOODNESS or TASTE of the Milk.



WHOLESALE ONLY OF  
L. LUMLEY & CO.,<sup>1</sup> America  
Square, LONDON, E.C.

PROCESS SO SIMPLE THAT ANYONE CAN CARRY IT OUT.  
OR ALL CHEMISTS, IRONMONGERS, &c.

## **SESSIONS!**

(MIDDLESEX & SURREY.)

### **CHEMISTS OBTAINING LICENSES**

Should write us now for terms and Price Lists. We are large importers of all Foreign Wines, and can show best Profit and Value. Good Price Lists, &c., with customer's own name on.

Holloway's Coca Wine and Holloway's Meat & Malt Wine are recognised as the best in quality, price, and get-up (protected). Those who have no License and desire to move with the times should write us for particulars.

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#### **CONCENTRATED**

# **PEPTONISED COCOA AND MILK**

AND

## **CONCENTRATED PEPTONISED MILK.**

These two preparations are made with pure rich PRE-DIGESTED Country Milk, and, by mere dilution with hot water, afford a delicious restorative beverage, the assimilation of which requires no digestive effort.

### **SAVORY & MOORE, LONDON.**

Tins, 2/6. Half-tins (samples), 1/6. Obtainable Everywhere.

## **TEE-TO-TUM TEAS**

ARE OF  
**EXCEPTIONAL VALUE.**

PRICES—

11d., 1/1, 1/4, 1/6, 1/8, 1/10, 2/- per lb.

In  $\frac{1}{2}$ -lb.,  $\frac{1}{4}$ -lb. and 1-lb. Packets, and 5, 7, or 10 lb. Tins.

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TEE-TO-TUM TEAS,  
Head Offices and Duty-paid Stores,  
27 & 28 WHITECHAPEL ROAD, LONDON, E.

ESTABLISHED 1760.

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All  
Chemists  
should stock these,  
the oldest and best known.

Stocked by the Leading Wholesale Houses.

**DUNHILL & CO.**

PONTEFRACT.

Free samples on  
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Colonial and Foreign  
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# NO BAD STOCK.

Original 6-doz. Case,  
£10 4s.  
3% Discount off  
6-case lots.

## MARIANI WINE

### SANTAL-MIDY CAPSULES.

Wholesale  
33/- a doz.

Retail,  
3/6 per bottle.

### FRANZ JOSEPH WATER.

Per doz.  
Large. 12/-  
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Original Case.  
25 Large. 22/6.  
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### NATIVELLE'S XTALISED DIGITALINE (GRANULES).

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THE MOST WONDERFUL TONIC WINE  
IN THE WORLD.



The ST. RAPHAËL QUINQUINA has the largest sale of any similar Wine in France. For Loss of Appetite, Anæmic Conditions, and Nervous Depression, it is the most wonderful Tonic Wine ever submitted. Apart from its marvellous restorative properties, it is also a pleasant and agreeable Wine, and can be used as a beverage with Mineral Water.

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VILNAC  
Registered  
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Of extreme utility in cases of (Patented).

Dyspepsia, Anæmia, Debility, Tuberculosis, Phthisis, Insomnia, Heart Weakness, Typhoid and other Fevers, all Wasting Diseases, Mental and Physical Overwork, Loss of Appetite, &c.

A peptonised product of milk containing all the constituents of the original milk (except fat) in a completely digested form. It is of great medical value for use in the sick-room, for convalescents, for those suffering from dyspepsia, insomnia, nervous disorders, &c.

Its value consists in the fact that the whole of the casein or curd of the milk is present in the Wine in the form of peptones, which are capable of being absorbed into the system without digestive effort. Whilst possessing all the valuable properties of a highly peptonised milk it takes the form of a sound and palatable Wine, of great use in all febrile disorders and cases of acute illness where milk or milk and a stimulant is essential, and often difficult to administer. It is in fact a powerful food stimulant and tonic, and may be used successfully with benefit both in illness and convalescence. It is a most useful appetiser and aid to digestion under any circumstances, and especially for the weak and aged.

Many valuable testimonials have already been obtained from medical men and others who have tested and used the Wine.

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FREE SAMPLES to Medical Practitioners only will be sent on application. Included with each sample is a small bottle of Tannic Acid in Solution. A simple experiment will then immediately demonstrate the Milk Peptones present in the Wine.

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30 per cent., 33 per cent. Brit. Pharm. 1898,  
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**PRICES QUOTED ON APPLICATION.**

Established  
1730.

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Established  
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COCA WINE.**

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Dr. A. B. GRIFFITHS says, "Second to none in the market." — Aug. 24, 1896.

CALE STREET DISTILLERY  
CHELSEA,  
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Also S.V.R. & S.V.M.  
At Lowest Prices. [3]

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(VINUM AURANTIL, B.P.) prepared in strict accordance with the Formula of the British Pharmacopoeia.

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|           |             |               |            |                              |            | s. d.   | s. d.    |                                                                                   |
|           | ...         | ...           | ...        | ...                          | ...        | 6       | 5 0      |                                                                                   |
|           | ...         | ...           | ...        | ...                          | ...        | 1 0     | 10 0     |                                                                                   |
|           | ...         | ...           | ...        | ...                          | ...        | 1 9     | 18 0     |                                                                                   |
|           | ...         | ...           | ...        | ...                          | ...        | 2 6     | 25 0     |                                                                                   |
|           | ...         | ...           | ...        | ...                          | ...        | 1 0     | 10 0     |                                                                                   |
|           | ...         | ...           | ...        | ...                          | ...        | 2 6     | 25 0     |                                                                                   |
|           | ...         | ...           | ...        | ...                          | ...        | 1 0     | 10 0     |                                                                                   |
|           | ...         | ...           | ...        | ...                          | ...        | 1 6     | 15 0     |                                                                                   |
|           | ...         | ...           | ...        | ...                          | ...        | 2 6     | 25 0     |                                                                                   |
|           | ...         | ...           | ...        | ...                          | ...        | 1 6     | 15 0     |                                                                                   |
|           | ...         | ...           | ...        | ...                          | ...        | 1 0     | 10 0     | CARRIAGE NOT<br>PAID.                                                             |
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IT HAS NO EQUAL FOR  
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REMOVES AND PREVENTS ALL  
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SAMPLE DOZEN **3/3**  
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WE SPARE  
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GOODS WELL  
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COLD CREAM,  
LANOLINE,  
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LAVENDER JELLY,  
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TOOTH PASTES  
(Various),  
VASELINES,  
&c., &c.

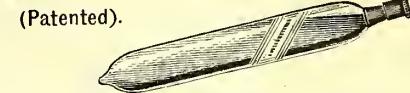
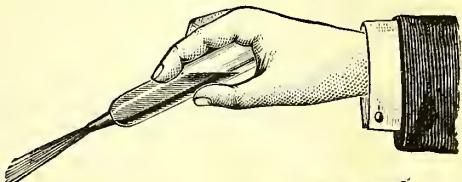


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CHOICELY  
SCENTED  
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FRAGRANCE RETAINED  
INDEFINITELY.

54/- Per Gross.  
FROM ALL  
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Recommended by  
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Unscented,  
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Although low in price, it ranks with high-class  
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Water White Mineral Oil, free from Sulphur (Paraffinum Liquidum B.P.)

LARDS. Prepared, Benzoated, Indurated.

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SOLE PROPRIETORS OF THE FAMOUS "GLENALLAN" PURE MALT WHISKY.  
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FINEST ORANGE WINE FOR QUININE.

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White, 98 to 100% and 30%.

[4]

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THE DENTIFRICE OF THE AGE.

ABSOLUTELY NOVEL AND INGENIOUS.

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Packed in tins 1, 2, 4, 5, 7, 10, 14, and 28 lbs., 56 and 112 lb. Drums, and  
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### OLEUM DEELINÆ

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GENERALLY ADOPTED BY THE MEDICAL PROFESSION FOR  
Ophthalmia, Scurvy, Ringworm, Eczema,  
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Packed in Cases—One dozen 1s. Bottles; One dozen 2s. Bottles. Pint  
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| Small. Assorted colours. | Per 6 combs | 2  | 3  |
| 1/- do. large            | " "         | 4  | 3  |
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Essential Oils delivered to Great Britain free house; for Export c.i.f. London or f.o.b. Hamburg. Essences prepared with Alcohol delivered in bond.

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**PETROLEUM JELLY** of all grades—white, half-white, and yellow.

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**CONCENTRATED SPIRIT VINEGAR**.

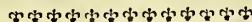
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PRICES REDUCED

The "Winged Lion" Brand

## Seeds in Packets

FIRST INTRODUCED TO CHEMISTS BY MESSRS. POTTER &amp; CLARKE.



THESE Packets have gained for themselves  
WORLD-WIDE CELEBRITY.  
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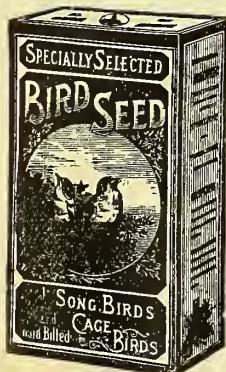
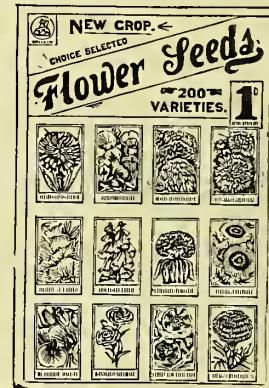
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KNOWN ALL OVER THE WORLD.

PUT UP IN CARDBOARD CASES WITH ATTRACTIVE DESIGNS IN COLOURS.

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*Our Combination is one of the best obtainable for all kinds of cage birds.*

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And at 54 & 56 Great Ancoats Street, MANCHESTER.

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FOR KILLING WEEDS  
ON  
GARDEN PATHS  
AND  
CARRIAGE DRIVES.

VERY SUITABLE FOR EXPORT.

THE MOST EFFECTIVE AND UP-TO-  
DATE WEED KILLER.

Retails at 2/-, 3/6, and 6/6 per tin.



IN ENAMELLED TINS  
FOR  
RETAIL ONLY  
BY  
QUALIFIED CHEMISTS.

NO RETURN EMPTIES.

BEST VALUE TO CONSUMER,  
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*Each tin contains a measure which holds just sufficient Powder to add to a bucketful (3 gallons) of water. Customers find this very handy, and much appreciate it.*

A 2/- Tin, as Sample, post free in the United Kingdom on receipt of P.O. 1/-  
SOLD BY ALL SUNDRY HOUSES.

ATTRACTIVE HANDBILLS AND SHOWCARD SUPPLIED.

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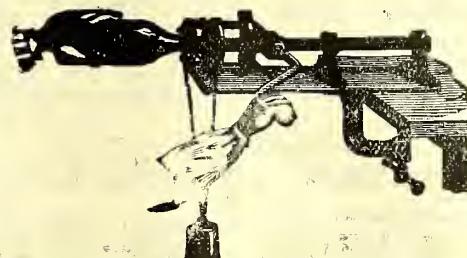
All Packet Tobaccos, Cigarettes, and other Tobacconists' Proprietary goods supplied at Manufacturers' own List Prices  
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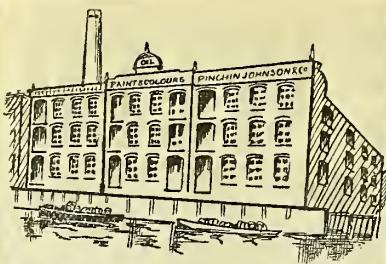
The only Machine  
which leaves no crease  
or pleat on the  
Capsule.



Can be fixed to any  
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A single pull of the lever  
is sufficient  
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Patentee—C. MELIN, 37 Crutched Friars, LONDON, E.C.

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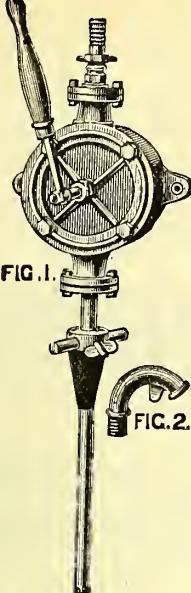
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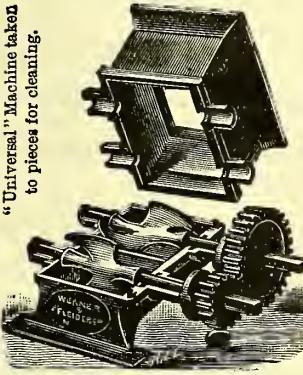
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Pharmaceutical Society of Tasmania.

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## COLONIAL TRADE.

IF there is one thing more certain than another regarding the future export trade of the United Kingdom, it is that the population of our Empire beyond the seas will be our best customers. The national statistics prove that the imperialistic spirit maintains it, and it behoves manufacturers and merchants to encourage it. The encouragement of colonial trade has been one of THE CHEMIST AND DRUGGIST's strong points from the outset. Through our annual Colonial Issue we give an exceptional opportunity for advertisers to increase their business with the colonies. This issue will be on April 29, and, in addition to those who receive it weekly, it will be sent to all buyers of druggists' goods in India, Burmah, Straits Settlements, South Africa, China, Japan, and the West Indies. The publisher will give any inquirer information regarding this important issue.

## Summary.

CHEMISTS' DINNERS at Bristol and Burnley are reported (p. 454).

POISONS REGULATIONS receive further attention (pp. 467 and 469).

A BLUE-BOOK on the use of phosphorus in match-making has been published (p. 458).

MR. W. L. CURRIE gives some suggestions in regard to the poisons regulations (p. 451).

WE have picked up some new ideas about x-rays and other apparatus at the Royal Institution (p. 450).

A CHEMIST who extracted a boy's sound tooth instead of a decayed one has had to pay 5*l.* damages (p. 463).

MR. H. W. MACROSTY contributes a further instalment of his socialistic views on the conduct of business (p. 468).

THE NAMES of the chemists who have passed the Spectacle-makers' Company's Examination will be found on p. 445.

PROFESSOR GREEN'S lecture to the Pharmaceutical Society on "Adverse Conditions in Plant-life" is reported (p. 448).

THE NEW B.P. formula for liquor bismuthi has been discussed by Newcastle chemists, who do not approve of it (p. 450).

A COMMITTEE of the General Medical Council does not think it necessary for medical men to have qualified dispensers (p. 443).

FACTORIES in which mercurials are handled are to be brought within the sanitary clause of the Factory and Workshops Act (p. 443).

THE GOVERNMENT Sale of Food and Drugs Amendment Bill has passed its second reading by a large majority in the House of Commons (p. 465).

THE PENULTIMATE COMPETITION in our analytical tournament is reported on. The leading competitor has obtained 493 marks out of a possible 500 (p. 442).

A GERMAN investigator is of opinion that some of the chief characteristics of cocaine are due to an associated isomeric alkaloid rather than to the cocaine (p. 457).

MR. A. J. DE HAILES, F.I.C., comments on the excessive zeal of some public analysts in reference to prosecutions for the sale of food containing a minute proportion of borax (p. 469).

THE DIRECTORS of Lewis & Burrows's Drug-stores proposed to pay a small dividend on the ordinary shares (p. 464). Their accounts furnish material for comment (p. 458).

MR. JESSE COLLINGS, on behalf of the Home Office, has stated in Parliament that the Privy Council do not think it expedient to schedule carbolic acid as a poison, but that they have prepared a Bill to regulate its sale (p. 465).

INSPECTORS under the Sale of Food and Drugs Acts have been active. We report prosecutions in respect of spirit of nitre, milk of sulphur, camphorated oil, Gregory's powder, eucalyptus oil, and bicarbonate of soda given instead of borax (p. 460).

AT THE MEETING of the North British Branch of the Pharmaceutical Society on Wednesday evening, the loss of carbonic-acid gas from sodium bicarbonate at ordinary temperatures was discussed, also the advantage of urine-analysis to chemists. The need for carbolic acid being placed on the poisons-schedule was emphasised by Mr. J. R. Hill (p. 448).

QUININE has been advanced 2*l.* per oz. by the makers, and the speculation continues. Opium is quiet and cheap. The Japanese Government monopoly of the Formosa camphor-forests begins on July 1, so that quotations from the East are higher. Quicksilver is weak in second hands, and menthol is on the down-grade. Drug-auctions were held in London this week, and are included in our Trade Report (p. 471).

## Students' Corner.

CONDUCTED BY RICHARD J. MOSS, F.I.C., F.C.S.

### QUALITATIVE ANALYSIS.

THE subject of the next exercise in qualitative analysis will be a mixture of not more than three salts. The mixture of salts is to be submitted to a thorough systematic examination, all its constituents are to be detected, and proof is to be given that the substances detected are the only constituents of the mixture.

Students' applications for portions of the mixture of salts (accompanied by a stamped and addressed envelope, not a stamp merely) will be received up to Wednesday, March 22, and the samples will be forwarded immediately.

Students' reports will be received up to Saturday, April 1. Each report should contain a concise account of the work done, and should include a list of the constituents detected. In this list any substance regarded as an accidental impurity should be distinguished from the essential constituents of the salts composing the mixture.

### REPORTS.

The powder distributed for analysis last month consisted of 8 parts of zinc sulphate, with 1 of mercuric chloride and 1 of copper sulphate.

The calculated composition of this mixture was:—

|                  |     |     |     |     |     |        |
|------------------|-----|-----|-----|-----|-----|--------|
| Hg               | ... | ... | ... | ... | ... | 7.38   |
| Cu               | ... | ... | ... | ... | ... | 2.54   |
| Zn               | ... | ... | ... | ... | ... | 18.12  |
| Cl               | ... | ... | ... | ... | ... | 2.62   |
| SO <sub>4</sub>  | ... | ... | ... | ... | ... | 30.61  |
| H <sub>2</sub> O | ... | ... | ... | ... | ... | 38.73  |
|                  |     |     |     |     |     | 100.00 |

A trace of iron and minute traces of calcium and magnesium were present as impurities.

There were 79 packets of the mixture of salts issued to applicants, and 43 reports of analyses were received in reply. The reports record no failures in the detection of copper and the sulphuric radicle, seven in the detection of mercury, three in the detection of zinc, and four in the detection of chlorine. It is interesting to note that on a former occasion when we received about the same number of reports on the analysis of a mixture of the same salts, but containing half the quantity of zinc, there were four times as many failures in the detection of that metal. There was twice as much mercury as on the present occasion, and half as many failures to detect it, while with twice the quantity of chlorine these failures were reduced to one quarter.

The chief feature in this exercise was the detection of mercury. It will be observed that, though the mixture contained only one-tenth of its weight of mercuric chloride, the proportion of mercury present was more than 7 per cent.—quite a large quantity. Mercury ought, in every case, to have been recognised as a constituent of the mixture at the very outset of the analysis. One of the first steps to be taken was to observe the effect of heat upon the mixture. There is no single test so well calculated to throw light upon the character of a substance as that depending upon the simple application of heat—provided, of course, the operator has made the effects of heat a study, as every chemist should.

When a little of the mixture of salts was introduced into a bulb-tube, or a quill glass tube closed at one end (a test-tube is too large), and heat cautiously applied, it was observed that the powder fused, and then water with an acid reaction condensed on the sides of the tube; at the same

time the powder lost its blue colour and became white. Copper sulphate becomes white with loss of water, therefore copper sulphate was indicated. Continuing the heating, and inclining the tube so as to prevent the water flowing back to the hot end, the next change observed was the condensation of a white crystalline sublimate. By cutting the tube the volatile part of the powder could be separated from the fixed part, which could be examined further. The sublimate was not likely to be organic, as there was scarcely any odour observable, and no carbonisation; it must consist of a compound of either ammonium, mercury, arsenic, or antimony. The sublimate dissolved, though slowly, in water; its solution did not evolve ammonia on the addition of an alkali, but gave a black precipitate with a drop of sulphuretted-hydrogen water, and a red precipitate with potassium iodide, soluble in excess of the reagent, pointing to mercuric chloride. These experiments were tried with a sublimate obtained from 5 milligrammes of the powder, and there was still some in reserve. When the fixed portion of the ignited mass was heated on charcoal, a yellow incrustation, which became white on cooling, was observed; this pointed to zinc. Thus with a very small expenditure of time and material it was ascertained, before beginning the systematic analysis in the wet way, that the mixture probably contained copper sulphate, mercuric chloride, and a zinc salt.

One of our correspondents drew attention to the yellow precipitate produced when silver nitrate was added to the aqueous solution of the powder. When silver nitrate is added to a solution of mercuric chloride, white silver chloride is precipitated; but in the presence of a sulphate the precipitate produced is yellow, and it contains mercuric sulphate. There is no reference to this peculiarity in any of the analytical text-books.

### PRIZES.

The First Prize for the best analysis has been awarded to T. H. H. FRANCIS, c/o Mr. Rossiter, chemist, 9 Grand Parade, St. Leonards-on-Sea.

Two Second Prizes have been awarded to

A. E. KING and A. E. BEESTON, both c/o Messrs. Fuller & Co., chemists, Rampart Horse Street, Norwich.

### MARKS AWARDED FOR ANALYSES.

|                               |     |     |                |             |     |     |     |    |
|-------------------------------|-----|-----|----------------|-------------|-----|-----|-----|----|
| T. H. H. Francis, first prize | ... | ... | ...            | Turps       | ... | ... | ... | 90 |
| A. E. King (second)           | ... | ... | 100            | Lindum      | ... | ... | ... | 90 |
| A. E. Beeston (prize)         | ... | 99  | J. P. L.       | ...         | ... | ... | ... | 90 |
| Aberthaw                      | ... | ... | 97             | Mercaptan   | ... | ... | ... | 88 |
| Urotropin                     | ... | ... | 97             | Aro         | ... | ... | ... | 87 |
| A. J. Bills                   | ... | ... | 96             | Lennox      | ... | ... | ... | 86 |
| Algol                         | ... | ... | 95             | Omega       | ... | ... | ... | 85 |
| H. Rodwell                    | ... | ... | 95             | J. R. Stott | ... | ... | ... | 85 |
| E. H. H.                      | ... | ... | 94             | Capitulum   | ... | ... | ... | 83 |
| Lux                           | ... | ... | 94             | E. M. Leese | ... | ... | ... | 81 |
| Dover                         | ... | ... | 94             | Kid         | ... | ... | ... | 80 |
| Huxham                        | ... | ... | 93             | Ledoc       | ... | ... | ... | 79 |
| Kings Walden                  | ... | ... | 93             | R. E. J.    | ... | ... | ... | 78 |
| Hydrarygium                   | ... | ... | 93             | Mydrine     | ... | ... | ... | 77 |
| Parmelia                      | ... | ... | 92             | J. W. T.    | ... | ... | ... | 75 |
| W. R. A. Gilman               | ... | ... | 91             | Cuban       | ... | ... | ... | 72 |
| Eserine                       | ... | ... | 91             | T. French   | ... | ... | ... | 70 |
| M. Meldrum                    | ... | ... | 91             | C. C. D. D. | ... | ... | ... | 60 |
| Euclid                        | ... | ... | 90             | Spero       | ... | ... | ... | 55 |
| Oleum                         | ... | ... | 90             | Sunny       | ... | ... | ... | 50 |
| J. W. Wigglesworth            | ... | 90  | T. H. Moore    | ...         | ... | ... | ... | 40 |
|                               |     |     | Unsigned paper | ...         | ... | ... | ... | 0  |

### TO CORRESPONDENTS.

**Prizes.**—The students to whom prizes are awarded are requested to write at once to the Publisher, naming the book they select, and stating how they wish it forwarded.

Any scientific book that is published at a price not greatly exceeding half a guinea may be taken as a first prize.

Any scientific book which is sold for about five shillings may be taken as a second prize.

**Note.**—All communications should include the names and addresses of the writers.

**MERCAPTAN.**—The precipitate you obtained with ferric chloride was evidently ferric hydroxide. In neutralising a solution of sodium carbonate it must be remembered that some carbonic acid remains in solution unless steps are taken to expel it. This acid affects litmus like a weak mineral acid. To avoid this effect the solution to be neutralised must be near the boiling-point if litmus is used as the indicator. Methyl orange is not affected by carbonic acid; it may, therefore, be used as an indicator with cold solutions.

**ARO.**—The change in colour when the powder was strongly heated was due to the decomposition of the copper salt. Carbonisation would have taken place at a much lower temperature, and continued heating under oxidising conditions would have removed the carbon.

**LENNOX.**—See remarks to "Aro." The behaviour of the powder when treated with dilute sulphuric acid showed the complete absence of an acetate.

**OMEGA.**—On heating the powder in a bulb-tube you should have observed that, after water had been expelled, a white sublimate condensed on the sides of the tube. By heating even a minute quantity of this sublimate with sodium carbonate it was possible to obtain globules of metallic mercury.

**J. R. STOTT.**—You might have ascertained that the calcium-chloride precipitate was not an organic salt by heating it. It did not carbonise because it consisted of calcium sulphate.

**CAPITULUM.**—The green flame of the burning alcohol must have been due to copper. The turmeric-paper test for boric acid may easily mislead unless you compare the colour obtained with that produced by hydrochloric acid both in the presence and absence of boric acid.

**E. M. LEES.**—The precipitate you obtained on adding hydrochloric acid to the sodium hydroxide with which the precipitated sulphides had been treated was evidently sulphur. You observed that it was white; arsenious sulphide is yellow.

**KID.**—You did not use enough sulphuretted hydrogen to completely saturate the solution of the powder; if you had, your brownish-yellow precipitate would have become quite black. The gradual transition of the sulphuretted-hydrogen precipitate from white to black, through shades of yellow and brown, is characteristic of mercury compounds.

**LEDG.**—The change of colour that you mistook for carbonisation took place at a temperature very much higher than would be required to decompose a citrate (see remarks to "J. R. Stott"). A quantity of mercuric chloride sufficient to give such a conspicuous sublimate could not be regarded as a mere trace.

**R. E. J.**—See remarks to "Kid" and "Mydrine."

**MYDRINE.**—On heating the powder in a bulb-tube there was a great deal more to be observed than you noted. At a gentle heat the powder fused in its water of crystallisation; at the same time water with a strong acid reaction condensed on the sides of the tube, and the substance lost its blue colour and became white. Then a white sublimate deposited on parts of the tube too hot for water to condense on. A few simple tests sufficed to show the presence of mercury in this sublimate.

**J. W. T.**—There was an abundant supply of material for carrying out any well-considered scheme of analysis. The apparent coloured ring you saw in testing for nitric acid was merely a refraction-effect due to the juncture of liquids of different density.

**CUBAN.**—You may have precipitated some of the zinc with the mercury and copper sulphides, but it was not possible to remove it all in this way. If you repeat the work with a similar mixture you may find the explanation of your failure to detect the zinc.

**T. FRENCH.**—See remarks to "Mercaptan," "Capitulum," and "Cuban."

**C. C. D. D.**—You omitted to ignite the powder in a tube; this important test showed the presence of a volatile salt. You did not attempt to prove the presence of more than one acid radicle.

**SPERO.**—The white sublimate you observed when you heated the powder in a dry test-tube was not explained in your report; it could not be attributed to any of the constituents you detected.

**SUNNY.**—You gave so little information about your work that there is no use attempting to criticise it. You should state plainly what you did with the powder, what you observed, and the conclusions you arrived at.

**T. H. MOORE.**—Copper sulphide is not altogether insoluble in ammonium sulphide, so that the sulphur precipitated from such a solution is not quite white; its colour is, however, very different from that of arsenious sulphide.

**UNSIGNED REPORT.**—This report contained neither name nor address, and no attempt was made to summarise the results obtained.

**WINTER TOURNAMENT.**—We have now reached the critical moment of this competition. Mr. Francis still holds his place at the top, and has indeed improved his lead by one point, the difference between his score and that of the next to him being four instead of three, as it stood last month. "Parmelia" and "Urotropin" have both been passed by Mr. A. E. King, who ties with Mr. Beeston for the second prize in the monthly competition, and this brings Mr. Beeston into the fourth place. It is a very keen contest, and, as the racing-reporters would say, a sheet would cover the first five.

The following are now the first ten:—

|                             |     |                 |     |     |     |     |     |
|-----------------------------|-----|-----------------|-----|-----|-----|-----|-----|
| T. H. H. Francis (Coronium) | 433 | Algol...        | ... | ... | ... | ... | 463 |
| A. E. King ...              | 489 | Mercaptan ...   | ... | ... | ... | ... | 454 |
| F. Giles (Parmelia)         | 482 | A. J. Bills ... | ... | ... | ... | ... | 453 |
| A. E. Beeston ...           | 479 | Huxham ...      | ... | ... | ... | ... | 452 |
| Urotropin ...               | 477 | Dover ...       | ... | ... | ... | ... | 451 |

## English News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

### Notification of Mercurial Poisoning.

We are indebted to the Home Secretary for a copy of a new order, made under section 29 of the Factory and Workshops Act, 1895, which places factories in which mercurials are handled on a level with those in which lead, phosphorus, or arsenic compounds are made or used in such a way as may lead to lead, phosphorus, or arsenical poisoning, or in which anthrax may be contracted. Section 29 of the Act requires that every medical officer attending on or called in to visit a patient whom he believes to be suffering from mercurial poisoning, contracted in any factory or workshop, shall notify the same to the Chief Inspector of Factories at the Home Office, giving the name and address of the patient, and the disease from which he is suffering, whereupon a fee of 2s. 6d. is paid to the medical officer. Failing notification the officer is liable to a fine of 40s. on conviction. When the Home Office is thus notified of a case of poisoning, the inspector and medical officer of the district in which the factory referred to is situated are informed of the case. It will be necessary, in future, that all factories where mercurials are made or used should be provided with washing conveniences, and such factories will be liable to the same inspection as obtains in lead and arsenic factories.

### Erythrol Tetranitrate.

The Home Secretary informs us that erythrol tetranitrate is not an explosive within the meaning of the Explosives Act, but the question is under consideration whether an official warning should be issued calling attention to its explosive character.

### Unqualified Dispensers to Medical Men.

From the report of a meeting of the Executive Committee of the General Medical Council held on February 27, which was published in the *British Medical Journal* last week, it appears that the Privy Council had communicated to the General Medical Council letters with regard to the employment of unqualified persons as dispensers to medical men from Mr. Arthur Oglesby, analytical chemist, Barnsley, and from Mr. Albert Cooper, F.C.S., M.P.S., 80 Gloucester Road, South Kensington, S.W. The Executive Committee adopted the following resolution:—

That the Committee recommend the subject to the consideration of the General Medical Council, but in the meantime express to the Privy Council that, whilst they fear that occasional accidents may arise from the employment by qualified medical practitioners of careless or incompetent dispensers, the cases, in

their opinion, are very rare, and it appears to the Committee that probably the best protection is afforded to the public by the responsibility of the practitioner for the acts or defaults of the servants whom he employs.

The *Medical Press* referring to this resolution, describes it as "a halting and illogical conclusion." "It must be apparent to everyone," remarks the *Medical Press*, "that the Committee, in assuming that such accidents are very rare, is jumping to a conclusion. No data other than the published law and inquests reports are open to its members, and no weight is given to the fact that in any case only fatal cases are likely to become public. Moreover, in the majority of instances, it must be easy for the practitioner to hush the matter up, a course which he has every inducement and every facility to adopt. A more straightforward way of dealing with this important question would be to state formally that the matter is not one which comes within the scope of the Council's jurisdiction, though none can question that if so minded the deliberate employment of incompetent dispensers might legally be declared by the Council to be inconsistent with the duty of the practitioner towards the public. We shall await with considerable interest the view taken by the Council of this recommendation."

#### Birmingham Drugs.

After an interval of nearly a year, the Birmingham health authorities have again begun to devote attention to the chemists and druggists of the city. A large number of samples of drugs have recently been collected, many being galenicals of the new B.P. The chemists have come out of the test well, for although the Health Committee have had occasion to caution one or two, in no case was the discrepancy considered serious enough to justify a prosecution.

#### Drugs in the West Riding.

In the annual report of Mr. A. H. Allen, Public Analyst for the West Riding of Yorkshire, it is stated that out of 2189 samples analysed 1,903 were genuine, 197 inferior or doubtful, and 89 adulterated. Of 10 samples of linseed taken 9 were genuine and 1 inferior; of 17 tinctures, 16 were genuine and 1 inferior; of 4 lozenges 1 was adulterated; of 47 samples of glycerin 1 was adulterated; of 47 samples of miscellaneous drugs 39 were genuine, 4 inferior, and 4 were adulterated. Four samples of olive oil were inferior or doubtful, and 1 sample of cod-liver oil was of a similar character. Only 1 sample of vinegar was taken and was adulterated. Mr. Allen comments on the neglect of the Government to cope with the defects of the existing laws against adulteration, but it is clear that when he wrote he had not seen Mr. Long's Bill. He also takes the opportunity of giving "an unqualified denial to the statement which has been publicly made that I have an interest in, or am a contributor to, any journal dealing with the adulteration of food or drugs with the exception of the *Analyst*, on the title-page of which my name appears as one of the Editorial Committee."

#### Adulterated Drugs in Glamorganshire.

Mr. C. A. Seyler, Analyst to the Glamorgan County Council, reports that during the past quarter he has examined 247 samples of food and drugs, of which twenty were adulterated. Among drugs he mentions four samples of camphorated oil, in two of which the olive oil was entirely replaced by mineral oil, and the camphor was also deficient. One sample was made with olive oil, but only contained half the proper proportion of camphor. In the fourth sample the camphor was approximately correct, but the oil was probably adulterated with at least 30 per cent. of cottonseed oil. The belladonna plaster which he received was not of the quality of the present or last Pharmacopoeia; it was not made from the root-extract, but was of a bright green colour, and only contained a trace of belladonna alkaloids. One sample of spirit of turpentine was probably adulterated with petroleum shale or naphtha.

#### Inspecting the Sewage-works.

About thirty members of the North-East Lancashire Chemists' Association paid a visit to the Blackburn Sewage-works on March 9, and inspected the chemical-process of treating sewage-matter. After the visit the members of the Association were entertained to tea by Councillor Law.

#### Preston Wholesale Druggists and Christmas Presents.

A meeting of wholesale druggists and drysalters was held at the White Horse Restaurant, Preston, on March 9, to take into consideration the policy of giving Christmas and New Year's presents. Mr. T. Seed presided, and Mr. J. C. Beardwood officiated as Secretary. There was a lively discussion, and some of the speakers thought that Blackburn, Burnley, and Wigan houses should join the movement before Preston agreed to discontinue giving such presents. The Secretary stated that Messrs. Blezard, Marsden & Kay Waterworth, Fell Brothers, Woods, Goodair, T. Parkinson, and W. Parkinson were in favour of the proposal, and ultimately the following resolution was unanimously adopted:—

That we, the wholesale druggists and drysalters of Preston, pledge ourselves under any circumstances whatever not to give any Christmas or New Year's gifts in the future and that the sum of 10/- be deposited in the hands of the Hon. Treasurer on December 1 in each year, and shall be held by him until March 1, and anyone failing to carry out the resolution shall forfeit the same to the Infirmary.

#### A Druggist's Death.

On March 11 the dead body of Mr. J. W. Hill, described as a wholesale druggist, of Reigate, was found in a Croydon coffee-house. Deceased had been missing from home for several days. At the inquest on March 13, Mr. Sydney Emms, chemist, Croydon, deposed that deceased had purchased 2 oz. of laudanum from his shop, saying he was a chemist. The empty laudanum bottle was found in deceased's bedroom. Suicide during temporary insanity was the verdict.

#### A Will-dispute.

Litigation in connection with the will of the late Mr. John Smith, chemist, Saxmundham, was decided at the High Court of Justice on March 6. The decision was in favour of the will making his wife his legatee, which was executed by Mr. Smith four days before his death. It will be remembered that the deceased gentleman committed suicide in October of last year by throwing himself in front of a train.

#### Counter-prescribing.

At an inquest held at Tooting, on March 8, the death of a child named Lilian May Whitehead, aged two years and nine months, was inquired into. The mother stated that her daughter was suffering from a bad cold and hoarseness, and she took her to a chemist, who prescribed a powder and a mixture for the child. Witness gave her a dose of the mixture, but as it seemed to do no good she discontinued it. Deceased died suddenly the same afternoon. Witness went for a doctor, but by the time she got one the child was dead. Mr. Arthur Coates, chemist, Tooting, said the child when brought to him seemed to be suffering from cold and an inflamed throat, for which he prescribed. The father called after the child's death, and he explained what he had prescribed. In 99 cases out of 100 he recommended people to take their children to a doctor, but in this case he did not do so. Dr. Henderson, who had made a *post-mortem* examination, ascribed the cause of death to a prostration arising from meningitis, accelerated by congestion of the lungs and acute bronchitis. A verdict in accordance with the medical evidence was returned, and the Coroner told the chemist when mothers brought their children to him to send them to a doctor, and perhaps give them something to relieve the malady. Mr. Coates again explained that this was his invariable rule.

#### The Coroner and the Doctor.

An inquest was held at Pimlico on March 10 into the death of Joseph Taylor, an art-repairer at the South Kensington Museum. Deceased, who had been in a depressed state of mind, took some cyanide of potassium, which he used for cleaning filigree work. An emetic of salt-and-water was administered by a fellow-worker, and a doctor was sent for, but said he could not attend, and advised the man's removal to the hospital. Deceased was then taken to St. George's Hospital, where he died shortly after admission. The Coroner remarked on the non-attendance of the doctor who was called, saying that if he had

been told that deceased had taken cyanide he had a responsibility on his shoulders which he (the Coroner) would not like to take.

#### Charge of Stealing.

At Oakham Police Court, on March 6, Mary Lyon was charged with stealing four tubes of toilet lanoline and one tube of cremolia, valued at 2s. 6d., from the shop of Mr. F. G. Pascall, chemist, Oakham. Defendant said she found the articles in her basket when she got home, but had no idea how they got there. Prisoner was fined 2s. costs, and her husband was bound over for her good behaviour for six months.

#### "Put-me-right" Powders.

A young man named Geoffrey Goodier was charged at Manchester Police Court on March 10 with obtaining money from various persons by fraud. The prisoner's method seemed to be to advertise in local papers for a partner with small capital to join him in the sale of "Put-me-right" powders for headache. Several persons had answered the advertisements, and had been induced to part with sums of money, a partnership agreement being signed and stamped. When they obtained orders, however, and wanted them executed, they could find neither the prisoner, the stock-in-trade, nor the money they had given him. Prisoner was committed for trial.

#### A Dispenser's Fraud.

Charles Watkins (63), described as a dispenser, was, at Birmingham Assizes on March 14, sent to three years' penal servitude for endeavouring to obtain money from Dr. Berlyn, of Birmingham, by fraud. The prisoner wrote to Dr. Berlyn representing himself to be Dr. Hickinbotham, an old friend of Dr. Berlyn's, now in Australia, asking for the loan of a few pounds. He had obtained the names from a medical directory, where he also learned that the two doctors had passed their final examinations in the same year. Prisoner had four times previously been convicted of fraud and forgery.

#### Syphon-returns.

At Westminster Police Court on March 13, George Greenough, carman, was charged with robbing his employers, Harrod's Stores (Limited), by means of a trick. The accused obtained money on many occasions by returning empty jars and syphons, which the prosecutors allege had been stolen or obtained in some unauthorised way from a department at the stores called the "return-room." It was stated that the carmen were not permitted to trade in "empties." The prisoner said the stores had not been prejudiced, as the "empties" had been given to him as gratuities for his civility. The Magistrate said the case had not been proved, but a very complicated fraud was alleged, and the prisoner would be remanded for further investigations.

The prisoner was brought up again on the following day, and, after further evidence had been given, was committed for trial, bail in 50*l.* being allowed.

#### Property-sales.

Mr. Alfred Arkle's chemist's shop, corner of Rydal and Ullswater Roads, Lancaster, with a Gilbey's agency and branch post-office attached, was sold on March 8, along with two houses and a piece of land adjoining, for 1,555*l.* The property was bought by a local plumber and electrical engineer.

For some time past rumours have been current of a building scheme which involves the pulling-down of a block of property in Market Street, Lancaster, in which is included the shop of Mr. H. Troughton, chemist. Accordingly Mr. Troughton, taking time by the forelock, has ensured his future permanence in the neighbourhood by purchasing an important block of buildings at 31 Market Street, which was sold on March 13. There was keen competition, the site being a good one, but Mr. Troughton eventually got what he wanted for 3,510*l.*

#### Students at the Soapworks.

On March 13 the students of the Imperial College of Chemistry (Mr. F. Davis, Pres'pal) visited the City Soap-works (D. & W. Gibbs, Limited) at Wapping. The party

were escorted over the works by Mr. K. Y. Gibbs, who explained to the students the whole process of soap and glycerin making. The casks of tallow are melted out by means of steam, and the melted fat is run into tanks, where it is mixed with caustic soda. The whole is then subjected to the action of steam and kept in motion. The soap is separated from the lees by means of brine, and is then run into a traveller which carries it to the frames, where it remains for three days before being cut into suitable and convenient sizes. Curd soap is made by dry heat, the steam passing through the tanks in coils. The steam employed in the works is generated by seven boilers, each 30 feet long, and maintained at a pressure of about 3 atmospheres. The lees from the tanks containing the salt and the crude glycerin are, after concentration *in vacuo*, subjected to centrifugal force, when the liquid containing the glycerin flows away, leaving the practically dry salt. The fluid is then distilled, the glycerin recovered and purified by redistillation, decolorised with animal charcoal, and filtered. The establishment was found to be a model of cleanliness and good arrangement.

#### Fires.

A fire broke out on March 13 at 43 Aldersgate Street, City, upon premises tenanted by Messrs. E. Lawrence, patent-medicine vendors. A lady in charge of the shop attempted to beat out the flames, but was badly burned on the hands and arms, and had to be removed to St. Bartholomew's Hospital. The fire was not overcome until the shop had been practically gutted.

An outbreak of fire occurred at the establishment of Mr. Turver, chemist and druggist, Market Street, Blackpool, on March 9, through some spirit of turpentine becoming ignited. The flames were subdued by means of syphons of aerated water before the fire-brigade arrived. The amount of damage done is estimated at 5*l.*

#### Drug-contracts.

The following tenders for the supply of drugs and sundries to workhouses have been accepted:—

Liverpool.—Messrs. Evans, Sons & Co. (for drugs and druggists' sundries); Ayrton & Saunders (for india-rubber appliances); J. Mellor & Sons (for methylated spirit); J. Reynolds (for surgical appliances).

High Wycombe.—Messrs. Young & Coley (High Wycombe (for cod-liver oil and quinine); H. Ridley, Princes Risborough (for disinfectants).

#### Chemists as Councillors.

The following chemists have been elected parish councillors:—

Mr. F. W. Place, Betley, Staffs.  
Mr. John Young, Theale.  
Mr. J. H. Cookson, J. P., C. C., Stanley.  
Mr. Joseph Thomas, Garstang.  
Mr. W. Metcalfe, Oswaldtwistle.  
Mr. J. L. Naylor, Station Road, Bamber Bridge.  
Mr. W. H. Gooch, Dedham.  
Mr. Francis English, Hapton, Rosedale.  
Mr. F. Rowe, Starcross.  
Mr. W. H. Haines, chemist's assistant, Laceby  
Mr. H. B. Palmer, Wingham, Kent.

#### Wine licences.

Off-wine licences have been granted to the following:—

Mr. E. G. Inge, chemist, High Street, Haslemere.  
Mr. E. W. Gough (Lewis & Burrows, Limited), for 92 Tottenham Court Road, W.

At Richmond Licensing Sessions, on March 8, Mr. John Egbert Griffiths, one of the directors of Howard & Co (Limited), chemists, Watford, applied for an off-wine licence for their premises at 25 Hill Street, Richmond. Mr. G. S. Crawshay, who supported the application, said the licence was wanted for the sale of invalid port and sherry. In answer to one of the Magistrates, he said a licence which stipulated for the sale of medicated wines only would not satisfy his clients, though they had no intention of carrying on the business of ordinary wine-merchants. The Bench decided that the application must stand over until the adjourned Licensing Sessions.

At the Highgate Licensing Sessions, on Wednesday, Mr. John Glover in the chair, Mr. John Murison, managing director of Park's Drug-stores (Limited), of 52 The Broadway, Crouch End, applied for a wine-licence. Mr. Glover: For medicated wines only? Mr. Murison: And others. Mr. Glover: We never grant it. The Clerk: But you cannot help it. Mr. Glover: We grant it if you will accept it for medicated wines only. Mr. Murison: I cannot accept it, and I give you notice of appeal.

Mr. Forbes applied for a licence on behalf of Mr. Clifford Bond Moore, chemist, of 8 Seymour Terrace, North Finchley. Mr. Glover: Are you willing to have it medicated wines only? Mr. Forbes: No, sir; he is not. Mr. Glover: We can only give a chemist a licence for medicated wines. If he is prepared to take that, he can have it. If he will not, we refuse the application. Mr. Forbes said the matter had been decided in a case in which the Kingston Justices had convicted a chemist. There were certain wines which a chemist sold which it was difficult to say were medicated. They had the tannin extracted, and in that sense only were they medicated. Mr. Glover: Will your client consent to take it for medicated wines? Mr. Forbes: I do not feel I ought to put him in that position. Mr. Glover: Rightly or wrongly, we are not going to begin to grant chemists licences on the same grounds as grocers. We will grant the wine-licence with the word "medicated" endorsed upon it. Mr. Forbes protested against a man being put in the position of having to give an undertaking which the Act of Parliament did not require. As a matter of law, the Bench had no power to make this condition. Mr. Glover remarked that if Mr. Forbes was right, then he could sell port or any other wine. Mr. Forbes: That is what the Act of Parliament states. Mr. Glover: We will take the responsibility of refusing it. He will not come to grief if he does not sell it. Mr. Forbes: I am sure, if he sells it without medicated, he will not come to grief. Mr. Glover: Will you take it with medicated only? Mr. Moore: I will take it with medicated. Mr. Glover: Granted. We may be wrong.

#### Not Granted.

Mr. Leo Joseph, chemist, Albany Road, Cardiff, made an application to the Corporation of that borough for permission to use all the street-lamps and electric-light standards for advertising-purposes. Mr. Joseph offered to pay 150/- per annum for the privilege; but the County Council, at its meeting on March 13, refused to accede to the application.

#### Suicide of a Chemist's Daughter.

On March 11 the dead body of Miss Eleanor Harrison, daughter of Mr. W. Harrison, chemist, Clitheroe, was found in her bedroom with a bottle of prussic acid, which had evidently fallen from her hands, alongside. At the inquest Mr. Harrison said deceased had lately been in her usual health. On the morning of her death she had prepared breakfast, and when she had done her housework went into the shop to dust. When near the prussic-acid bottles she inquired why they were wrapped up and capped. Mr. Harrison replied it was to keep up the strength of the acid. Miss Harrison had rheumatic fever towards the end of last year, and her mother had been ill for about twelve months. A brother of deceased having given evidence as to finding the body, the jury returned a verdict of suicide while of unsound mind.

#### Ether-explosion.

An explosion of ether occurred on March 14 in the surgery situated in the centre of the Hospital for Males at Rochdale Union Workhouse. The cause of the explosion is unknown, and resulted in the death of the superintendent nurse, another nurse being also so badly burned that her condition is most precarious. The surgery was set on fire by the explosion, and great damage was done. It is said that a nurse was dusting the bottles when the explosion occurred. The inquest on the body of the dead nurse was opened on March 15, and, after formal evidence of identification had been given, was adjourned for a fortnight.

#### Spectacle-makers' Company Examination.

Out of 105 candidates who were examined for the diploma of the Company at the March examination 66 passed. The

following are the names of those connected with the drug-trade who have passed:—

G. J. Blore, 281 Broad Street, Pendleton.  
T. Burrell, 48A High Street, Montrose.  
W. A. Fox, c/o Messrs. Reynolds & Branson, Leeds.  
G. Haslop, 55 Union Street, Oldham.  
H. Kemp, 35 Wilhambra Road, Chorlton-cum-Hardy.  
J. C. Kidd, 551 Cheetham Hill Road, Manchester.  
A. Lander, The Medical Hall, Canterbury.  
H. Pain, 13 Sidney Street, Cambridge.  
S. Stephens, Market Street, Milnsbridge.  
A. Upton, 35 High Street, Maidenhead.  
C. Wilkinson, 124 Market Street, Manchester.

Mr. Pain, Cambridge, has obtained the first place in the whole examination, being the first of the two honours men.

## Irish News.

*Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.*

#### Pharmaceutical Society of Ireland.

*April Examinations.*—Applications should be lodged by 11 o'clock A.M. on the following dates:—For the Preliminary examination, on Tuesday, March 21; for the Pharmaceutical Assistants' examination, on Monday, March 27; for the Registered Druggist examination, on Tuesday March 28; for the Pharmaceutical Licence examination on Wednesday, March 29.

#### Won't Raise his Salary.

The Local Government Board have informed the Poor-law Guardians at Skibbereen that they have received the Guardians' representations on the subject of increased remuneration of the compounder of medicines to the dispensary, but are not prepared to alter the decision already given refusing the advance recommended by the committee.

#### Irish Kieselguhr.

At a recent meeting of the Royal Dublin Society Mr. J. Holms Pollok read a paper on the large deposits of kieselguhr in County Antrim. They occur on both banks of the lower Bann, and are of exceptional purity. Analysis shows the kieselguhr to be of good quality and suited for many industrial purposes, but not for making dynamite.

#### Business Changes.

A new pharmacy is being opened at Lord Edward Street, Kilmallock, by Mr. W. J. Healy, M.P.S.

Dr. H. A. Hadden, who is the proprietor of medical halls in Wexford and New Ross, has opened another branch-establishment at Enniscorthy, in premises recently vacated by Mr. Weston Roberts.

#### Personal.

Mrs. Payne, wife of Mr. J. C. C. Payne, President of the Pharmaceutical Conference, is one of the three lady candidates for election on the Belfast Board of Guardians. Mrs. Payne recently gave a statement of her views on the poor-law question before the Society for Brightening Workhouse Infirmary Life, of which Society she is the nominee.

Mr. John Baxter, chemist, Ballymoney, was elected unopposed as representative for Ballymoney on the Antrim County Council.

#### The Pharmaceutical Society's Circular.

The Coleraine Urban Council last week discussed the circular received from the Pharmaceutical Society of Ireland asking the Council to pass a resolution requesting the Government to insert in the Companies Acts a clause for the purpose of preventing persons not qualified from compounding prescriptions as a trading company. Mr. Todd (grocer) failed to see what the Board had got to do with such a communication. The Chairman (Mr. W. J. Baxter, M.C.P.S.I.) said it was a matter for the Board whether they would pass such a resolution as the Society requested. Mr. T. Henry (grocer): Are you going to prevent us selling ha'porths o'

salts, Mr. Chairman? (Laughter.) The Chairman: Oh, no; it is to prevent incompetent persons from compounding prescriptions. Mr. J. M. Bamford (general merchant): Although I am one of those who, along with Mr. Henry, sell "ha'porths o' salts," I think we should pass the resolution and send it forward, as requested by the Pharmaceutical Society. Mr. Barrie (general merchant), in seconding the resolution, said if the Companies Act had been used as a cloak to allow unqualified persons to compound medicines, he thought, as a public Board, they should take steps to prevent the evil. The Chairman having pointed out the qualifications necessary to entitle an individual to compound prescriptions, the motion was put to the vote and carried.

#### Guardians' Doings.

At a meeting of the Kinsale (co. Cork) Board of Guardians on March 10, a letter was read from the Local Government Board to the effect that it was not their intention to have all drugs analysed, but that samples should be selected by the medical officers for that purpose. At the same time the Guardians were instructed to pay a fixed salary to a recognised analyst for the purpose of the analyses referred to. The Guardians expressed the opinion that, as there had never been any complaint about the medicines, it would be an absurd expenditure to appoint an analyst, and a resolution was passed by the Board that, if such an official were to be appointed, he should be paid from another source than the rates.

At a meeting of the Youghal Board of Guardians on March 10, the following tenders for the supply of medicines and medical appliances for the half-year were received:—Kiloh & Co., Cork: medicines, 16½ per cent. off Local Government Board specified price; appliances, 5 per cent. ditto. O'Ryan & Co., Tipperary: medicines, 21 per cent. abatement; appliances, 11 per cent. ditto. Thacker & Hoff, Dublin: medicines, 30 per cent. off; appliances, 25 per cent. Clark & Co., Dublin: medicines, 35 per cent. off, and 5 per cent. for cash; appliances, same abatement. Fanning & Co., Dublin: appliances, 20 per cent. off. Apothecaries' Hall, Dublin: medicines, 10 per cent. off. Medical Requisite Company, Cork: appliances, 25 per cent. off. Leslie & Co., Cork: medicines, 35 per cent. off; appliances, 15 per cent. off. Cork Chemical and Drug Company: medicines, 40 per cent. off. Smith & Sheppard, Dublin: appliances, 22 per cent. off. Hunt & Co., Dublin: medicines, 27½ per cent. off. In reply to the Chairman, Dr. D. J. Murphy said that the quality of the medicines and appliances supplied by the previous contractors could not be excelled. It was thereupon decided to renew the contracts with the Cork Chemical and Drug Company for medicines, and the Cork Medical Requisite Company for appliances.

At the meeting of the Newry Guardians on March 11, the contract for medicines was given to Messrs. Clarke & Co., Belfast, who agreed to allow 35 per cent. on the gross cost of the articles purchased at the prescribed prices, and 5 per cent. on the net cash received. Messrs. Robt. Campbell & Co., Belfast, secured the contract for medical and surgical appliances, agreeing to allow 25 per cent. on the gross cost of the articles purchased at the prescribed prices.

#### French News.

(From our Paris Correspondent.)

A LADY-PHARMACIST.—Bordeaux is one of the few towns in France which can boast of a lady-pharmacist who keeps open shop. Mme. Lekeu's pharmacy is in the rue du Tondu, a middle-class residential neighbourhood, and she has been established for about twenty years. She holds the second-class certificate, and employs a male assistant.

PRIZE-WINNERS.—The Paris Faculty of Medicine has just issued a list of its annual award of prizes. Amongst them it may be mentioned that the Lacaze prize (10,000f.) for a work on typhoid fever, is given to Dr. Widal, assistant professor at the Faculty, for his method, the serodiagnostic, enabling the diagnosis of typhoid fever to be made with

certitude. Also that M. Wulffing-Luer gets 300f. out of the Barbier prize of 2,000f. for his syringe for hypodermic injections.

AT THE SCHOOL OF PHYSICS AND CHEMISTRY.—The Paris Municipal Council not only provides the students at this school with gratuitous instruction, with a view to preparing them for an industrial career, but it gives them besides 50f. (2*l.*) in cash every month. This was modified at a meeting of the Council last Friday, after a somewhat lively discussion, by a narrow majority. It appears that the parents of a certain number of the students are in easy circumstances, and can well afford to maintain their sons without a subvention; consequently the director of the school has been authorised, under the new arrangement, to use his discretion in allowing the indemnity, but the question as to its payment will not be raised until after the examinations.

PHARMACY ON THE STAGE.—The tribulations of a pharmacist's assistant form the subject of "An Excellent Affair," a new vaudeville operette at the Folies Dramatiques Theatre, Paris. The first scene is the shop-parlour of the pharmacist, and introduces us to the assistant, Majorel (M. Guyon Fils), who is engaged to Dorothée, his employer's ward, a young lady possessing the dowry which he so much needs to purchase the goodwill and stock of her guardian's flourishing business, but for whom he entertains no particular affection. On the contrary, he is very much enamoured of Lucette, a penniless maiden of sweet 17, who has crossed his path. The old struggle between Mammon and Cupid, intensified by the fury of Lucette's adoptive parent, gives rise to some amusing scenes, among which may be quoted the surgery of the dentist, who advertises "painless extraction," and saves his reputation by engaging a vigorous organ-grinder to drown the cries of his patients. Finally, everything is happily arranged; Lucette's long-lost father turns up, and provides the necessary "dot." Majorel purchases the officine, and Dorothée consoles herself with a dashing corporal of dragoons, whom she infinitely prefers to her guardian's assistant. The piece, somewhat weak in plot, is redeemed by Guyon's amusing impersonation of the pharmacist's assistant.

LITERATURE.—The first volume of the new edition of the "Traité Élémentaire de Chimie Organique," by MM. Bertholet and Jungfleisch, has been issued recently, and contains considerable additions. In the preface the authors say: "At the present day science is ever making more rapid progress as a result of the increasing number of workers, and the certainty of methods acquired by discoveries which have followed each other during the last half-century. As a result we have been forced to make a considerable effort to keep the present volume up to date." Amongst the additions are: "Notions relative to isomerism and new conceptions of stereochemistry and dynamic isomerism; the evolution of our present knowledge on the hydrocarbons and on the alcohols derived from them; the study of polyatomic alcohols and of the aldehydes; the study of the acetones, camphors, &c.; derivatives of the general families of organic chemistry."—"Récamier et ses Contemporains (1774-1852): Essai d'Histoire de la Médecine aux XVIII. et XIX. Siècles" is an interesting book by Paul Triairé, just published by Baillière fils, Paris. The author shows the tenacity and intelligence with which Récamier carried out his life's work, and the important part he took in the introduction of modern therapeutics. In "Le Cabinet Secret de l'Histoire" Dr. Cabocinès endeavours to bring to light the part played by medicine in what may be termed the side wings of history. He gives curious details regarding the maladies of the two Louis XIV. and XV. of France, and concerning the Surgeon Souberbielle, who judged Marie Antoinette, &c.

EARLY-CLOSING.—The majority of the Paisley chemists have agreed to close their business-premises on Tuesday afternoons at 2 o'clock. This movement has also been joined by several of the medical men who keep pharmacies.

UPWARDS AND INWARDS.—In order to meet the demands of their rapidly increasing business, Messrs. Sharp & Dohme, of Baltimore, have decided to erect a seven-story addition to their warehouse and laboratories. The addition will cost about \$10,000. Work is already in progress, and the new structure will be occupied as soon as completed.

## Colonial and Foreign News.

PERSONAL.—Mr. C. F. G. Meyer, of the Meyer Brothers Drug Company, St. Louis, and his son, have gone on an extended trip through Old Mexico.

RUSSIAN CHEMICAL IMPORTS.—The Russian Finance Minister reports that the value of the imports of chemicals during the first nine months of 1898 was 10,299,000r., which was a considerable increase on the previous year. Great Britain contributed 25 per cent. of the imports, and Germany one half.

INDIA'S FOOD-PRODUCTS.—Among the important exhibits recently received by the Philadelphia Commercial Museum is a collection from the Royal Commercial Museum, Vienna, containing about 2,000 samples of all the raw products of India, including all kinds of medicines, foods, dyeing-materials, gums, resins, oil-seeds, perfumery, spices, fibres, animal and mineral products.

ATROPINE FOR UROTROPIN.—At Bologna recently a pharmacist received a prescription which ordered 6 grammes of urotropin in a mixture containing twelve doses. The assistant who dispensed it used atropine, and the patient in due course took a dose, but, strange to say, the hospital authorities succeeded in counteracting the effects of the 1/2 gramme dose, and the patient recovered.

THE FUTURE OF CUBA.—The resources of Cuba are attracting attention. It is stated that the island is rich in medicinal plants. There is an abundance of sweet basil, mint, peppermint, wild and sweet marjoram, thyme, and the castor-oil plant. The woods contain copal, turpentine, and resin and textile plants. Cuba is also rich in minerals, and many mineral springs may be found there.

A NEW CHEMICAL-FACTORY.—The Pennsylvania Salt Company, of Philadelphia, are making plans to build a \$3,000,000 chemical-factory near Wyandotte, Mich., where so many soda-ash plants now flourish. The company have factories at Pittsburg and Philadelphia, and are said to be the largest users of kryolith in America. It does not manufacture salt, but produce chemicals of various kinds from soda ash, and also manufacture aluminium.

PHARMACY IN DENMARK.—We mentioned some time ago that it was proposed to do away with the privilege system in Danish pharmacy. The Bill to settle the matter has just been thrown out by Parliament on the second reading. The Ministry proposed in the Bill to retain a mixed state of things, especially the old privileged system, along with new concessions. Parliament wishes to inaugurate the Swedish system of gradual extinction. Now matters are at a dead-lock.

INDIAN INDIGO.—The *Behar Herald* says that there was a meeting of indigo-planters at Mozufferpore recently to discuss indigo. Everyone present seemed to be unanimous that indigo was going badly in Behar, and that the chief necessity was to procure first-class seed. It was resolved to petition Government to send a competent man to Java to find out how they manufacture indigo over there, and what seed they use, as they seem to work the business in the Dutch Indies on more profitable lines than in India.

N.Y. TRADE AND TRANSPORTATION BOARD.—A meeting of the Drug-trade Section of the New York Board of Trade and Transportation was held on February 23, Vice-Chairman Dr. W. J. Schieffelin presiding. Mr. Hartford, of the Executive Committee, reported that Mr. B. T. Fairchild, who had been elected Chairman of the Section, had declined that office, and the committee recommended that Dr. W. J. Schieffelin be elected Chairman and that Mr. John McKesson be elected Vice-Chairman. These recommendations were unanimously adopted. Mr. Peters reported that he had recently visited Washington as a representative of the Board's Special Committee on the Customs Administrative Act. He said that arrangements had been made to provide for a larger force of employés at the local Appraisers' Stores, and he suggested that those importers who are annoyed by delays at the Appraisers' Stores should make complaint to Appraiser Wakeman and ask for an increase of the force of examiners and appraisers' assistants.

## Pharmaceutical Society of Great Britain.

### EVENING MEETING.

AT the evening meeting, held on March 14, at 17 Bloomsbury Square, W.C., Mr. Walter Hills in the chair-Professor J. REYNOLDS GREEN lectured on

### ADVERSE CONDITIONS AND THEIR REMEDIES IN THE LIFE OF PLANTS.

He said they frequently heard such expressions as "struggle for existence" and "survival of the fittest"; but when they looked in the book of Nature it is difficult to believe in the reality of such things. After showing some slides of forest scenes, where all was apparently peaceful, but in reality scenes of conflict and trouble, the lecturer turned his attention to the difficulties which meet plants, and how they overcome them. The functions of cells, respiratory process, and the methods which plants have of circulating water were then spoken of, the remarks being illustrated by lantern diagrams, and in the last case by specimens of white azaleas, tulips, and hyacinths, which had become coloured by immersing in a solution of eosin. He then spoke of the importance of light to the life of plants, as without it they were unable to make use of the food they absorbed. The manner in which plants have met the difficulties of their environment was illustrated by the way in which the common ling had met the conditions of its moor life, in that its roots were deeply seated and its stems wiry and straggling. *Erica tetralix* and *Geranium pyrenaicum*, with their leaves flat on the ground, and arranged so as to obtain the maximum of light, were examples of how plants overcome the difficulties of vertical illumination, and the Norway maple, *helianthemum*, *stramonium*, *Atropa belladonna* were given as examples of the mosaic-like way in which upright plants exhibited their leaves to the light. The use of the vilamen on the roots of epiphytic orchids for absorbing the moisture of the air, and how the shapes of leaves were adapted to retaining water, and the many devices which insectivorous plants had for procuring nitrogen in insects, which otherwise they would have a difficulty in obtaining, were the other matters dealt with in the very interesting lecture.

The attendance at the meeting was above the average.

### NORTH BRITISH BRANCH.

A MEETING was held at 36 York Place, Edinburgh, on Wednesday evening at half-past eight, Mr. W. L. Currie (Vice-Chairman) presiding in the absence through illness of Mr. J. L. Ewing, Chairman of the Branch. There was a good attendance.

Mr. W. B. COWIE read a note on

### THE TEMPERATURE AT WHICH SODIUM BICARBONATE DECOMPOSES.

The author said that as no information could be obtained on this subject from the usual authorities he made some experiments, which gave interesting results that seemed likely to be of practical utility. The first attempt to determine the temperature of liberation of carbonic anhydride was made in Schröter's apparatus fitted with a thermometer, and connected with a U-tube containing lime-water. The column of sulphuric acid in the apparatus exerted a certain amount of pressure, retarded the liberation of carbonic anhydride, and vitiated the results. Several other expedients were tried, and ultimately it was found that the most satisfactory results were obtained by placing the sodium bicarbonate in a small retort furnished with a thermometer and heated by a sand-bath. The retort was connected with a U-tube containing a sufficient quantity of saturated solution of bauxite to seal both limbs. The outer limb was connected with a second U-tube containing sticks of sodium hydrate, so as to exclude atmospheric carbonic anhydride. The temperature in the retort was checked by a second thermometer inserted in a test-tube placed in the sand-bath beside the retort. Two well-known commercial brands of sodium bicarbonate gave the following results:—

| Sample A                             | Found                 | Calculated |
|--------------------------------------|-----------------------|------------|
| 98.05 NaHCO <sub>3</sub>             | Loss on ignition      | 36.92      |
| 1.95 Na <sub>2</sub> CO <sub>3</sub> | Total CO <sub>2</sub> | 37.06      |
| 100.00                               | ...                   | 52.128     |
| Sample B                             |                       |            |
| 97.2 NaHCO <sub>3</sub>              | Loss on ignition      | 36.64      |
| 2.8 Na <sub>2</sub> CO <sub>3</sub>  | Total CO <sub>2</sub> | 35.86      |
| 100.00                               | ...                   | 51.35      |
|                                      |                       | 51.97      |

Both samples were, therefore, of good quality, but sample A was the better of the two. This preliminary examination was made with a view to determine that the samples used were sufficiently pure to give satisfactory results. The mean of three experiments with each sample was A 54.6°, B 52.6°. From these results it was apparent that pure sodium bicarbonate began to decompose and give off carbonic anhydride when heated to a temperature of between 52.6° C. and 54.6° C., and it had been found that by the time the temperature rose gradually to 70° C. the bicarbonate was completely decomposed. It was incidentally observed that phenolphthalein solution was a ready and delicate test for the detection of a carbonate in a bicarbonate. A freshly-made saturated solution of a pure bicarbonate gave no colour but only a slight opalescence with a single drop of the reagent, but the solution became pink immediately if the bicarbonate contained the slightest trace of carbonate. It was also observed that a 2 per cent. aqueous solution of sodium bicarbonate immediately decomposed when the temperature reached 20° C., while a saturated aqueous solution did not decompose until the temperature reached 30° C. Potassium bicarbonate was found to behave in a similar manner. It was obvious, therefore, that infusions or other aqueous menstrua should always be cooled to 15° C. before adding to an alkaline bicarbonate.

In the discussion which followed, several gentlemen expressed surprise that Mr. Cowie should have got bicarbonate to decompose at so low a temperature as 54.6° C. Mr. LUNAN said his experience was that it was impossible to decompose bicarbonate at a temperature less than 70° C., and he asked Mr. Cowie what quantity of carbonic anhydride was given off at this low temperature. It must, he thought, be necessarily very small. It would be impossible to granulate a powder at so low a temperature as 54°, because they could not get cohesion. The quantity lost in granulating at 70° must be very small, because the results obtained by Mr. Davison and himself indicated a total of less than 9.7 per cent. Mr. Cowie's results indicated that the present Pharmacopeia was entirely at sea, and Mr. Dyer seemed also at sea in his explanation as to why the carbon dioxide was lost. Mr. HILL referred to the amount of work involved and the care required in conducting such experiments as those the results of which Mr. Cowie had placed before them. He had made a distinct acquisition to chemical knowledge, because he had determined a point in regard to the action of heat on sodium bicarbonate which, so far as he knew, had not been the subject of previous examination.

Mr. COWIE replied, and stated, in answer to Mr. LUNAN, that he believed that by continuous heating at 54° the whole of the carbonic anhydride could be given off.

Mr. A. CURRIE then read his paper on

#### PHARMACISTS AND URINE-ANALYSIS,

in which he said this branch of work furnished an excellent opportunity for cultivating an intimacy between medical practitioners and pharmacists. He gave a practical demonstration of the course of analysis, and emphasised the importance of a thoroughly boiling temperature and rapid titration in volumetric sugar determination.

Mr. HILL spoke of the analysis of urine as a profitable extra in connection with pharmacy. It had come to be known a good deal among ordinary people that a urine-analysis was a very important index as to one's state of health, and a considerable number was now in the habit of having a regular analysis made at stated periods. There was no class of men better qualified for this kind of work than chemists and druggists, and it would be in their own interests to follow in the lines of Mr. Currie.

Mr. C. F. HENRY said they were handicapped in Edinburgh

with regard to this kind of work, for when they intimated to medical men that they were prepared to do such work, they were informed that medical men could get it done for nothing at the research-laboratory of the Royal College of Physicians. Until two or three years ago he was under the impression that urine-analysis was an intricate matter to deal with, but it was very simple indeed. The CHAIRMAN said that in the West medical men asked them to undertake such analysis, and it brought its own reward. Not only did the medical men come to the shop but it brought the patients also. Mr. HILL then read the following notes:—

#### INSOLUBLE PESSARIES OF ICNTHYOL,

the circumstances of which had been brought to his notice by Mr. A. K. Stewart. He said pessaries containing 15 per cent. of ichthyol were being pretty extensively prescribed at present. Several medical men had recently complained of their insolubility, or, rather, infusibility. In every instance the samples complained of were found to have been made with gelatin bases, which gave a tough and almost insoluble mass, varying, apparently, in proportion to the heat employed in preparation. With 15 per cent. of ichthyol it had been found that a perfectly satisfactory and readily soluble pessary might be made with oil of theobroma. Martindale recommended the addition of beeswax, but that tended to raise the melting-point, and in practice had not been found necessary.

Mr. HILL also communicated a note on

#### LINIMENTUM TEREBINTHINAE, B.P.,

which, he said, had given rise to much discussion, and the official formula had been entirely changed. The practical difficulty seemed to lie in the mixing of the soap with the water, especially when working with small quantities. To simplify and facilitate the ready making of small quantities of the liniment, the soap might be dissolved in a small quantity of alcohol (90 per cent.), or by using an equivalent quantity of Hebra's spiritus saponis. This being made by dissolving 2 oz. of soft soap in 1 fl. oz. of 90 per cent. alcohol, and the product being  $2\frac{1}{4}$  fl. oz., it follows that 2 fl. oz. and 30 minimis of the solution contained the official quantity of soft soap required to make 1 pint of liniment—namely,  $1\frac{1}{2}$  oz. Proceeding in that way a perfect creamy liniment which kept well could be made in a few minutes without the use of a mortar. They should then add the solution of soap to 2 fl. oz. of the water in a stoppered bottle; further add gradually the solution of camphor in turpentine, shaking vigorously after each addition; and finally make up to 1 pint with sufficient water. The latter operation could be conveniently effected in a York Glass Company's graduated mixing-bottle. The alcoholic soap-solution could be very readily made at the time by dissolving  $1\frac{1}{2}$  oz. of soap in  $\frac{1}{2}$  fl. oz. of alcohol by a gentle heat, and then proceed as already indicated.

Remarks were made by Mr. DUNCAN, Mr. LUNAN, and Mr. McDIAHARD on the storage and dispensing of poisons. Mr. C. F. HENRY directed attention to the collection of bottles, stoppers, and apparatus intended to comply with the regulations for the storage and dispensing of poisons which was brought together at the recent meeting of the Edinburgh District Chemists' Trade Association.

Mr. HILL in this connection remarked that the poison that killed Dr. Boyd was carbolic acid. That event ought to bring to a point the persistent efforts that had been made by the Society to get carbolic acid scheduled. No one could tell why the Privy Council consented to carbolic acid being a scheduled poison in Ireland, while they refused to schedule it in Great Britain. By far the greatest number of deaths by accident and suicidal poisoning in England and Wales was by carbolic acid. He hoped the practical outcome of the lamentable accident to Dr. Boyd would be the scheduling of carbolic acid.

The CHAIRMAN supported Mr. Hill's remarks, and said that with regard to the proposal that the inclusion of carbolic acid as a scheduled poison should be urged on the Privy Council as an absolute necessity, they would have Mr. Cross down on them; but he thought they would be able to overcome him, as they had done already.

It was agreed to instruct Mr. Hill to write to Mr. Ewing, expressing sympathy with him in his illness, and hoping that he would soon be restored to health.

## The Winter Session.

### Royal Institution.

AT the meeting held at the Royal Institution on March 10, at which Mr. Justice Stirling presided, Professor H. L. CALLENDAR gave a discourse on

#### MEASURING EXTREME TEMPERATURES.

The lecturer said he had originally hoped to deal with the whole range of the thermometer, but found that was impracticable in one lecture. Therefore, although he had been promised as much liquid air as he liked, and had even heard that the day before half a litre of liquid hydrogen had been prepared, yet he was obliged to neglect the cold end of the scale, and confine his remarks to high temperatures. In measuring these, endless difficulties and discrepancies presented themselves, as instanced by the determination of the temperature of the sun—the most fundamental *datum* of astro-physics—and the extremely discrepant results obtained by different observers. The difficulties were summed up in the word extrapolation, the results being far more dependent on the particular formula used to extend the curve to temperatures where direct observations were impossible than on the real amount of solar radiation. The lecturer then briefly compared the different methods of measuring high temperatures. The bulb method, depending on the expansion of volume or increase of pressure; the optical method, in which the change of refractivity was noted; the acoustical, where the wave-length of sound was compared; and the resistance methods, where effusion through a small orifice or transpiration through a fine tube was measured. Professor Calendar then showed that the advantages of the resistance methods were the smallness of the apparatus and ease of manipulation, the sensitiveness and accuracy of measurement, the absence of irregular changes of volume or leakage, and there being only one scale to read. A model of the gas-resistance balance by the Wheatstone-bridge method which he had devised was shown. To illustrate the great sensitiveness obtainable by it, he mentioned that he had constructed an apparatus on the same principle for measuring the moisture of the air in Canada, which worked on a pressure of one-millionth of an atmosphere.

During the discourse it was mentioned that the viscosity of gases increases with heat, and among the experiments was one showing the melting of platinum at 1,610° C. The lecturer had intended to show the melting of iridium, but Messrs. Johnson & Matthey were unable to produce a piece of iridium of the size he required.

#### THE EXHIBITS.

Among the exhibits shown in the Library was one by Mr. A. A. C. Swinton of an electrolytic break for induction-coils. When a strong current is passed through an electrolyte it becomes intermittent and gives out a shrill note, and it occurred to Dr. Wehnelt, of Charlottenburg, to use it as a break for the induction-coil. The apparatus consists of a cell of sulphuric acid and water (sp. gr. 1.205), in which the cathode, a sheet of platinum (as in the Groves cell), is immersed. The anode, which consists of a platinum wire fused into the end of a closed glass tube, contact being made inside the tube by a copper wire dipping in mercury, is also immersed in the acid cell. This cell is interposed between a 100-volt current and the primary terminals of the induction-coil. When the current is turned on violent electrolysis takes place, a shrill note is produced according to the size of the platinum point, and a thick ribbon-like discharge at the secondary terminals. The method promises to be of use in *x*-ray work, as a Crookes tube is brilliantly and steadily illuminated, producing excellent fluorescence on the screen and shorter exposures when taking a radiograph. The difficulty at present is to make tubes which will stand the current, platinum is melted by it, and although osmium is not disintegrated it soon becomes red-hot, and the vacuum alters rapidly under the intense bombardment.

Messrs. C. E. Müller & Co., 148 High Holborn, W.C., were showing their new double-surface condenser. The cooling water, flowing in a thin stream down the outer wall

of the condenser-body, is free to evaporate, and its latent heat of vaporisation has mainly to be derived from the vapour undergoing condensation. It is claimed that this condenser is only one-fifth the size of a Liebig's condenser of equal power, and, owing to its vertical position, takes up very little bench-room. It is made in metal or glass; a glass one, with a body measuring  $4\frac{3}{4}$  by  $1\frac{1}{8}$ , will condense over a litre per hour.

Messrs. J. J. Griffin & Sons were showing Holloway's gas-furnace. The furnace is fitted with a new kind of gas-burner, which appears to answer very well. It is used for heating crucibles in assay-work.

### Newcastle-on-Tyne Chemists' Association.

A MEETING of this Association was held on March 8, Mr. T. Maltby Clagge in the chair. A discussion arose out of a Federation circular, which resulted in a resolution urging the Pharmaceutical Society to include ammonia in the list of poisons. Mr. F. R. DUDDERIDGE then read a paper on

#### LIQUOR BISMUTHI,

of which the following is an abstract:—

It has been stated that the moist bismuth citrate in the new B.P. formula is more soluble than the dried article. I question that. A few weeks ago a retail friend told me that he had found considerable difficulty in getting the moist citrate dissolved to anything like a clear solution without using a large excess of solution of ammonia, and on attempting to drive this off by heat, down came the citrate again. This result has been corroborated by several of my students in preparing small batches of it, and in THE CHEMISTS' AND DRUGGISTS' DIARY, 1899, it is stated that "considerable difficulty arises in taking into solution the whole of the precipitated citrate of bismuth." The directions given in the B.P. are also lacking in fulness. We are told to dissolve the bismuth oxynitrate in the nitric acid diluted with an equal volume of water (presumably in the cold, as nothing is said about heat being applied); then to add water with constant stirring until a very faint opalescence is produced; add the potassium citrate and potassium carbonate dissolved in a "little" water; heat the liquid to the boiling-point; cool; separate the precipitate; wash it, &c. On proceeding in this way, dissolving the potassium citrate and carbonate in that delightfully vague quantity "a little" distilled water, heating and cooling as directed, no precipitate separated, but a magma was the result. The B.P. should give some clue as to the quantity intended by "a little." More water was added to this magma, the whole heated to boiling, and transferred to a filter. On testing the filtrate with litmus-paper, it was found to be strongly acid, and on adding sulphuretted-hydrogen water to it, it gave a dense brownish-black precipitate of bismuth sulphide. Other batches gave similar results, the washings depositing a precipitate on standing, although passing through the filter perfectly clear at first. This led me to investigate the relative proportions of ingredients used in the liquor. In practice the quantity of potassium carbonate ordered in the B.P. is not sufficient to neutralise all the nitric acid, hence the presence of bismuth in the washings. To neutralise the nitric acid, 236 gr. B.P. potassium carbonate (83 per cent.) is required, but the B.P. only orders 175 gr. This doubtless accounts for the low result of bismuth sulphide obtained in estimating a sample made by B.P. process, as pointed out in THE CHEMISTS' AND DRUGGISTS' DIARY, only 492 grammes being obtained from 10 c.c. of the 55 grammes officially required. It does not, however, account for Mr. J. C. Umney's statement in the same article that, by the addition of citric acid and more ammonia in the final stage of the process, 10 c.c. will yield 0.605 grammes  $\text{Bi}_2\text{S}_3$ . Taking the B.P. quantities each 10 c.c., containing 0.7 grammes bismuth subnitrate and 0.7 grammes potassium citrate, should yield 0.59 grammes (nearly)  $\text{Bi}_2\text{S}_3$ , allowing for no loss in the process. In practice, as is well known, it is far easier to get too high rather than too low a result, owing to increase of weight due to oxidation of the sulphide whilst drying, with liberation of free sulphur. By using MacEwan's process 0.601 grammes is said to be obtained, but here a larger quantity of bismuth subnitrate is

taken—viz., 660 gr.\* instead of 613 gr. to the pint. To my mind, it would have been much better if the authorities had not altered the old process of preparation, but improved the mode of estimation by weighing the bismuth as oxide instead of sulphide. Mr. T. E. Wilson tells me he finds no difficulty in obtaining an easily-soluble citrate by a slight deviation from the B.P. process. His method is to dissolve the sub-nitrate in the nitric acid and water without further dilution, then add the potassium carbonate, dissolved separately in a little water, and finally the solution of potassium citrate. This, of course, does not prevent loss of bismuth through excess of unneutralised acid.

In the discussion which followed,

Mr. J. GIBSON (Hexham) said he had noticed that potassium citrate was sometimes alkaline and sometimes acid. The salt should be examined before being used in liq. bismuthi.

Mr. GILDERDALE thought the solution of ammonia was the cause of the fungoid growths which appeared in liq. bismuthi. He had found few samples pure enough for use in making this preparation.

Mr. G. F. MERSON agreed generally with previous speakers that the official process was not satisfactory. He preferred MacEwan's formula, but had found that after mixing the two solutions, more ammonia was required to fully precipitate all the bismuth. He did not think that pharmacists were bound to abide by the strict letter of the pharmacopoeial directions, provided the finished products responded to the official standards. He found washing the precipitate a tedious process, it being almost impossible, working upon fairly large quantities, to get rid of the last traces of nitrate.

Mr. T. MALTBY CLAGUE did not think the process of 1898 a step in the right direction. The amount of washing required rendered it impracticable in laboratory-work, especially when some gallons were required; it could not be done much inside a week. Mr. Proctor had demonstrated that manufacturers formerly sent out a liquor which gave evidence of nitrate. The 1885 liquor only needed an increase in the amount of ammonium citrate, so that a small amount of alkaline bicarbonate would not cause a precipitate when dispensed.

Mr. DUDDERIDGE, in reply, said he favoured the suggestion that the solution of ammonia was often the cause of the fungoid development.

### Sheffield Pharmaceutical and Chemical Society.

At the meeting of this Society, on March 9, Mr. G. Squire (President) in the chair, Mr. ELLINOR read a paper on the "Medicine-stamp Acts." He said he proposed to give a résumé of the Acts, their "diabolical interpretation," why the licence was an anomaly, and his suggested remedy. He sketched the history of the Acts, criticised their application, and argued that it was an anomaly that chemists and druggists, to whom the selling of poisons and the public safety were entrusted, should be required to take out a further licence to do the same thing they were already licensed to perform. If the licence were issued only to registered persons under the Pharmacy Acts it would be different. But it was degrading to the calling of pharmacy to sell such poisons as were put on the market by unregistered persons, or any nostrum, poisonous or not, of which nothing was known but the monstrous curative properties described on the labels, of which we had so many glaring examples. He thought definite action should be taken. Pharmacy up to 1898 was dominated by pharmaceutical chemists who were a small majority; the Minor men, who were a large majority, had no voice in its management. Therefore the time had come when the programme must be pharmacy for pharmacists. He suggested that the Pharmaceutical Society should refuse to allow its licentiates to take out a second licence issued by an irresponsible body to perform that which they were already licensed to do, or supply stamped medicines as nostrums, and should formulate conditions under which such preparations as chlorodyne might be sold. Further, if the poisons regulations were to be of any service to the public

safety they must be enforced, and they should call on the Council to strike off the register the names of persons who covered unregistered persons or companies.

After a short discussion, in which the CHAIRMAN, Mr. PRESTON, Mr. WARD, and Mr. NEWSHOLME took part, Mr. ELLINOR moved a resolution requiring the Council of the Pharmaceutical Society to take the necessary steps to legally bring about the reform he had advocated; but this was withdrawn on the suggestion of Mr. NEWSHOLME, who explained that the Pharmaceutical Society had already made certain suggestions to the Lord Chancellor.

### Glasgow and West of Scotland Pharmaceutical Association.

At the meeting on March 9 (Mr. W. L. Currie in the chair) this Association discussed

#### THE POISONS REGULATIONS.

Mr. CURRIE read a paper on the subject, in the course of which he said he agreed with the opinion that such regulations—especially as regards the mechanical devices—were an insult to properly-trained men, and tended to cast suspicion on their educational acquirements. But they must remember that the great mass required looking after, and that legislation must be for the whole body. The question what poisons the regulations covered was easily answered. It had been argued that, by recent decisions, preparations containing even the smallest quantity of a scheduled poison would be included. Even should such be the case it would not entail great hardship. Better to be over-careful than run the risk of a prosecution. Dealing with the regulations for keeping poisons, Mr. Currie said he was re-arranging his system of keeping poisons and adopting a combination. Such articles as liq. strychninæ, liq. arsenicalis, tr. opii, lin. belladon, and aconiti, he had on his shelves in N.M fluted green bottles; morphia, arsenic, chloral hyd., hydrarg. perchlor, &c., in W.M. bottles of the same type, and placed on the top shelves. There was no doubt as to the bottles being distinguishable by touch from the other bottles near them. Such preparations as atropine, cocaine, hydrocyanic acid, &c., which were not usually in such large bulk, he had in a press set apart for the purpose, and a tablet on the outside indicating poisons. Chloroform and preparations he had in glass-capped bottles. The argument that placing poisons together in one place increased the risk of accident did not, in his opinion, hold good. He was rather of the opinion that the very fact of poisons being in one place suggested greater caution. Clause 3 would not prevent suicide, but should lessen the number of cases of poisoning by misadventure. The public were now so well accustomed to the hexagon fluted bottle—which seemed to have given most satisfaction—that it would, he thought, be a mistake to make an alteration. The *Daily News* had suggested a triangular bottle; but he did not think it was better than the hexagonal fluted bottle. A Q.C. had suggested a "spiked cork," the spikes to be blunt so that the hand groping in the dark might not be injured. The idea was very antiquated, and could not be depended on with any certainty. The cork might be left out, or the top come off—what then? But what had the cork to do with the question at all? It was distinctive bottles they had to do with, and why should anyone grope in the dark when looking for a bottle of medicine (poisonous or not) during the night? And what about the whole-salers? They were not affected by any regulations in the supplying of poisonous preparations, but it would be of great advantage if wholesale people would send out poisonous articles in distinguishable bottles. The cost would not be any more, and the extra precaution would, he thought, be much appreciated.

Some discussion followed, and in the course of conversation the death by misadventure of the Rev. Dr. A. K. H. Boyd was referred to, and the speakers all insisted that no blame whatever could be laid upon the dispenser of the medicines forwarded to Dr. Boyd.

In connection with this paper Mr. DAVID WATSON, the Hon. Secretary, exhibited a large collection of devices, gathered from every part of Scotland and England, in use for distinguishing poison-bottles.

\* Only 617½ gr. to the pint. See "Pharmaceutical Formulas," page 528, where the method of precipitation given is better than that of the B.P.—Ed. C. & D.

Mr. THOMAS DUNLOP afterwards submitted a

#### NOTE ON THE (B.P.) NITRITE TEST OF EUCA LYPTUS OIL.

In this he mentioned that he had received a letter from Mr. R. F. Baker, of Sydney, N.S.W., regarding green coloration in the production of this test (which was fully discussed by Messrs. Baker and Smith in the *C & D.* February 18, page 299). Mr. Dunlop said that the information contained in their letter is a valuable contribution to the chemistry of eucalyptus oil. The B.P., in making no mention of the colour, seems to indicate that the precipitation of phellandrene is the only thing worthy of note. This is emphasised by Squire, who, however, makes the additional statement that "a globulus oil . . . assumes a green colour." The author has examined three samples of globulus oil by the B.P. method and Baker and Smith's modification of it. The results are as follows:—

No. 1.—B.P.—On the addition of the nitrite solution there was feeble effervescence, with scarcely any development of green colour. The green colour of the oil, after separation, was deeper than before.

B. & S.—On the addition of the acid there was immediate opalescence at the line of contact. In a minute or two the surface of contact became greenish; the colour increased for two hours; at the end of ten hours the oil stratum was greenish-yellow (ol. limon. tint), opalescent, and with a distinct white line at the line of contact; no further change at the end of twenty-four hours.

No. 2.—B.P.—More lively effervescence; development of green colour more marked; the green colour of the oil after separation was deeper tinted than in No. 1.

B. & S.—Immediate opalescence; in a minute or two the surface of contact became dirty greenish-yellow, which gradually disappeared, and the colour gradually assumed a yellow tint, which at the end of ten hours was orange-yellow. In two hours a substratum of flocculent matter occupied one-third of the oil-layer; in ten hours it occupied half; in twenty-four hours this had not increased.

No. 3.—B.P.—Very brilliant green colour during effervescence, which was very brisk; the green colour of the oil after separation was paler than in Nos. 1 and 2.

B. & S.—Immediate opalescence; in a minute or two the surface of contact became dirty green. This soon changed to greenish yellow. Within half an hour the oil-layer was freely traversed with white tufted matter; in two hours the growth occupied the whole layer; in four hours the oil-stratum was a soft magma; in ten hours the consistence was firmer; no further change at the end of twenty-four hours, except that the mass was pale amber coloured.

The author concluded from these observations that No. 1 oil contained no phellandrene, and only a trace of pinene; No. 2 a fair amount of both; and No. 3 a larger amount of pinene, and phellandrene questionable. Baker and Smith's test will detect phellandrene which would escape notice by the official test. He found also that with ol. terebinth. the colour was as brilliant as that produced by any sample of eucalyptus oil.

Mr. THOMAS S. BARRIE then read a short paper on "Selenium and Tellurium."

#### Cambridge Pharmaceutical Association.

A GOOD audience assembled in the Cambridge University Botanical Lecture-theatre on Friday evening to hear a lecture by Professor Reynolds Green on "The Nervous System in the Vegetable World," the lecture being illustrated by numerous lantern projections. Alderman Deck (President of the Association) was in the chair.

Professor GREEN began by reminding his audience that for a long time there had been held to be one fundamental distinction between the animal and the vegetable world—viz., that the animal had a monopoly of the power of feeling, using the term "feeling" in its widest sense. But this difference could no longer be maintained, for they found in the vegetable kingdom something which was strikingly like the nervous system in the animal. This seemed more striking as a dictum than in explanation, for the professor's idea of a nervous system is that it is the means of bringing an organism into exact harmony with its environment, and that is a condition which plants especially strive after. He then gave familiar examples of plant-nutrition and plant-stimulus, and then startled the audience by asking the question, "Can plants see?" to which he replied that they

have the power of appreciating differences of illumination. He showed a plant which, having been grown in a closed box with a hole on one side, had developed in a bent position, the inclination of the stem being towards the hole through which the light came into the box. This seemed to indicate rudimentary sight. He then passed on to show that plants have a sense of touch, some tendrils being so sensitive that merely stroking them once or twice with a pencil or a brush produces a definite curvature. On the motion of Mr. A. S. CAMPKIN, J.P., seconded by Mr. WHITE, a hearty vote of thanks was accorded to Professor Green.

#### Edinburgh Chemists', Assistants', and Apprentices' Association.

A MEETING of this Association was held on March 8, Mr. G. H. C. Rowland (President) in the chair. Mr. G. SENTER gave some

#### EXPERIMENTAL ILLUSTRATIONS OF SOME SCIENTIFIC THEORIES.

Mr. Senter explained the theories as to the properties and motions of atoms and molecules, and illustrated and explained the phenomenon of vortex-rings by a simple experiment, in which two  $\frac{1}{2}$ -oz. pots, the one containing a little strong ammonia and the other hydrochloric acid, were placed inside one of the ordinary pasteboard boxes in which a gross of  $\frac{1}{2}$  test-tubes is sent out. The box is set on its end, and a hole the size of a penny is cut in the bottom of it. After the ammonia and acid have been put into the pots the lid of the box is put on. The box then becomes filled with a very dense white smoke, and by tapping smartly on the lid very pretty vortex-rings fly out from the circular hole in rapid succession. He then explained the theory of sound-waves, which he illustrated by means of the manometric-flame apparatus, showing the fundamental note and the variants which give the distinctive sound of the different vowels. Light-waves were next explained, and their distinction from sound-waves pointed out. A clock placed in the receiver of an air-pump gradually ceased to be heard ticking as the receiver was exhausted, showing that the medium by which sound was propagated—namely, air—was being removed. But the clock remained perfectly visible, showing that light-waves must be propagated by some other medium—namely, the hypothetical body called ether. As an interesting application of the reflection of light-waves, he exhibited and explained the construction of a designer's kaleidoscope, in which, by means of three mirrors fixed at an angle of  $60^\circ$ , a practically indefinite series of exquisitely beautiful and symmetrical patterns were produced by rotation of the apparatus from several pieces of broken coloured glass and minute tubes containing coloured liquids which constantly changed their position. He then explained the wave-motions of the ether, which were associated with electrical phenomena. By means of a hand-dynamo he showed how muscular energy could be readily transformed into electric motive force, sufficient to light up four incandescent electric lamps arranged in series. A simple illustration of the arc electric light was given by two ordinary lead pencils pointed at one end in the usual way. An incision on one side as far as the lead core was made near the other end of each, and round this copper wires were bound. The wire from one pencil was attached to one terminal of the ordinary corporation electric supply, and the wire from the other pencil to the other terminal. On bringing the points of the pencils together a perfect arc light was produced. Mr. Senter finished by exhibiting in operation the apparatus used in Marconi's system of wireless telegraphy.

#### Midland Chemists' Assistants' Association.

AT the meeting of this Association, held on March 8 at Birmingham, Mr. F. H. ALCOCK gave a lecture entitled,

#### AN HOUR WITH THE POLARISCOPE.

After speaking of the construction of the polariscope he referred to the probable origin of the term "polarised" light. It was because the rays of light took up a position which it was thought bore a resemblance to the disposition of iron filings when magnetised. Polarised light he

classified as reflected, single or double, refracted and absorbed. By using a polariscope in connection with a microscope Mr. Alcock showed the effect of polarised light on *Tous les mois* starch, mentioning that by this means the presence of minute quantities of starch in such things as powdered gentian was readily demonstrated. Norrenburg's apparatus was used to show the process of polarising by reflection, after which the properties of tourmaline and herapathite were explained. In speaking of Nicol's prisms he emphasised the importance of the wave-plate. He also laid stress upon the use of the quartz-plate in effecting circular polarisation in contradistinction to plane polarisation. Mr. Alcock next touched on the different substances in the B.P., the purity of which were determined by means of this instrument, mentioning aconitine, tartaric acid, and certain essential oils, such as oil of eucalyptus, oil of lemon, oil of rose, and oil of turpentine. Apparently, the official variety of the last mentioned included all turpentines, whether they twisted the ray to the right or the left. Mr. Alcock spoke of the use of the instrument to the brewer for arriving at the sugar-strength of the worts he used without having to resort to the lengthy process of determination by copper solutions. The expense of the apparatus, however, would, he thought, prevent it finding a place on every pharmacist's counter.

### Ancient Feeding-bottles.

PROFESSOR MOSBY lectured before the Bloomsbury Anti-quarian Society on March 11 on "Ancient Feeding-bottles." He said Greek nurses used to carry with them a sponge full of honey in a small pot to stop the children from crying, and that in the British Museum there are two Greek vases dating from 700 B.C., which are much like the feeding-bottles used by the Romans subsequently. Another example the lecturer exhibited was a terra-cotta vessel, bow-shaped, with a funnel rising from the middle of the back. In 1861 a feeding-bottle was dug up in the old Roman cemetery of St. Sepulchre, Canterbury. It was of a bright-red polished ware, and had doubtless been deposited with the body of the child to whose wants, when alive, it had ministered.

[In the *C. & D.*, April 8, 1893, reference was made to the ancient feeding-bottles of similar shape in the collection of Mr. Ransom, of Hitchin, two of which were given as illustrations.]

### Western Chemists' Association.

AT their meeting on March 15 this Association discussed the question of conformity with the new poison regulations. The President (Mr. J. F. Harrington) was in the chair, and about two dozen members were present.

Mr. C. B. ALLEN opened the discussion. He said when the President asked him to initiate this discussion he objected on the ground that, these regulations having existed under another name for more than a quarter of a century, it was probable that every member of their Association had adopted them to a greater or less degree, and each one would know best what changes to make. But he afterwards thought that an examination of the clauses might bring about more practical conformity. So long ago as 1869 he wrote a letter attacking the Pharmaceutical Society for their extreme stupidity in not passing the regulations as part of the Act. This view he had always adhered to. Some of the journals had published ideas from various sources but he held that all purely mechanical contrivances must be distasteful to the trained pharmacist. With regard to clause 1 he thought there would be no difficulty. The name would necessarily be on the bottle, and an ordinary "poison" label would be a sufficiently distinctive mark. But they must remember that poisonous proprietaries and packed goods would require to be stored in the same way. Whether the word "poison" constituted a distinctive mark or not, they could not, of course, decide. In regard to clause 2, Mr. Allen thought the practical man preferred using the ordinary caps with an indiarubber band, and large caps made of tough Manila-paper could be obtained which would cover any pot or bottle. To render vessels distinguishable by touch there were various excellent devices. Sub-

section (c) almost made a poison-cupboard indispensable. Lockers used at present for other purposes could easily be turned into poison-cupboards. Clause 3 was the only one in the regulations in which there was any inconsistency. While it was legal to sell 1 oz. of laudanum in a plain ordinary bottle, it was illegal to sell it with 7 c.c. of water added if to be used for a lotion. The whole question should, however, be regarded not only from their own, but also from the outsiders', point of view, and in fulfilling the regulations there would be no difficulty which practical ingenuity could not overcome. Although wholesalers were exempt, it was only reasonable to expect that they also would conform to the regulations, and that poisons would be delivered to customers in proper bottles. If that were carried out fully, the difficulty of storage would lose half the anticipated worry. He had lately seen the storage system in naval and military hospital stores, and found the Government regulations were carried into effect. He had got his label-printer to make him a set of small poison-labels in yellow, sheets of which he exhibited to the meeting.

Mr. PARKER thought the only difficulty lay in dealing with preparations containing small quantities of poisons—cough-lozenges containing a small proportion of an opiate, for instance. These were rarely stored in distinctive bottles, but they could easily be made so by affixing a narrow strip of red paper just below the label on the ordinary shop-bottle. This would not be sufficient to attract the attention of the customer, but would be seen at once by the seller. Or the bottle might be made distinguishable by touch by pasting two vertical strips of thick indiarubber on the back of the bottle where it would be grasped. For potent poisons the ribbed bottle was, in his opinion, the best. All that was needed to make a cask of arsenic conform to the regulations was a rope tied round the side and across the top and front, the name of the substance, and word "Poison."

Mr. ANDREWS thought bottles used for poisonous lotions, &c., should be uniform throughout the trade.

Mr. CRACKNELL asked what was to be done if belladonna liniment were ordered in a prescription? Would it be necessary to "name the article" on the label as set forth in that clause? He contended that it was clearly set forth that the name of the article must in every case be given.

Mr. HICK said he used strips of rubber plaster on his shop-bottles which were cracked, and he thought to use the same for poisons might lead to confusion. He thought fluted bottles (not necessarily blue or green) were far better.

Mr. BOWEN drew attention to the sale of cocaine pastilles and jujubes without a poison-label.

Mr. PICKARD said there was a popular and well-advertised proprietary article in daily use which he believed was a liniment of belladonna, sold in an ordinary bottle. Must they put it in another (poison) bottle before selling it? He had tried to get a good wide-mouth poison-bottle for sending out poisons in powder form, but could find none on the market. In what sort of vessel were poisonous ointments to be dispensed?

Mr. ROGERS advocated attaching Silverlock's special poison-labels to all poison-bottles.

Mr. HINES thought the responsibility of labelling proprietary medicines "Poison" should rest with the proprietors, not with the chemist.

Mr. WOOLLENS would hesitate to label proprietaries without the consent of the proprietors.

Mr. ALLEN, replying, said he was afraid the rubber slips suggested by Mr. Parker would be objectionable to many people. Morphia and ipecac. and similar lozenges should be kept in a fluted bottle, and sent out with a poison-label and an additional warning that they be not given to children. He thought it would be very difficult to agree on a universal poison bottle of a special shape. He preferred the bottle described by Mr. Rogers. As a further precaution he would use a red cap with "Poison" printed on the top. Mr. Cracknell's was a fine point, but he believed that by and by the Act would be amended to provide for all the difficulties. He agreed with Mr. Pickard's remarks about the difficulties in selling poisonous proprietaries, &c., held that they were bound as the responsible sellers not to vend them without a poison-label and the other requirements of the regulations. He had had the same difficulty as Mr. Pickard with regard to wide-mouth poison-bottles.

## Festivities.

### THE LONDON BOTTLE EXCHANGE DINNER.

This was the thirteenth annual dinner of the London Mineral-water Bottle Exchange and Trade Protection Society (Limited), and it was held at the Hotel Cecil on March 9. Mr. E. S. Crick, of Barrett's Brewery and Bottling Company, presided, supported by the Permanent Secretary (Mr. Walter Davenport); and amongst the nearly 200 diners were the heads of all the great mineral-water concerns of London and the provinces, and of those which come under the head of "alied trades." Mr. W. Adpar Jones (Idris & Co.), Mr. Mark Beaufoy, Mr. James Johnson, Mr. Blaxter (Barnett & Foster), Mr. Howard (Hayward-Tyler's), Mr. Steinem (Carbonic-acid Gas), and Mr. Glover, of bottle-box fame, were typical representatives of the industry in London; whilst the top table teemed with representatives of the trade from Lancashire and Yorkshire, Birmingham, Liverpool, Manchester, Bristol, the Channel Islands, and Scotland. The Society, it appears, has conquered or killed all its enemies. The Chairman and Secretary both seemed peaceful and contented. There were none of the one-time long array of details showing the millions of bottles, boxes, and siphons which had come back to their rightful owners through the agency of the Bottle Exchange; no reports of battles in the Law Courts against people who had fraudulently used other folks' bottles; not even a complaint of the druggist who puts vitriol into the soda-water bottle. The work of the Society was practically accomplished, and the members had but to sit at their ease and complacently contemplate the good work accomplished. The Society had educated the trade up to what was right and proper, said the Chairman; he would not go so far as to say that it had made them more honest; he would rather say they had formerly erred through ignorance or want of organisation. One new matter the Chairman had to talk of, and that was a benevolent fund which had been started since the last annual dinner. And he made a good point by urging that it should be in fact not only a benevolent but a beneficent fund—that they should not only wish to do good, but should actually do good. The programme, which bore on the face of it excellent portraits of the Chairman and Secretary, and which, as usual was a work of art in printing, contained half-a-dozen toasts—viz., "The Queen," "Success to the Society," "The National Union and Kindred Societies," "The Guests and Visitors," "The Press," and "The Officers of the Society." Mr. Walter Davenport replied for the Society to the President's speech which we have just summarised; and then Mr. James Johnson waxed eloquent on the good feeling that existed between the members of the trade all over the country. Mr. Richard Johnson, J.P., of Wigan, replied to this, as President of the National Alliance of Mineral-water Manufacturers, and stated that they had this year done good work in getting their trade removed from the list which the Home Secretary had scheduled as "dangerous," and also in getting good terms from the insurance offices in the matter of compensation for accident. Mr. R. H. Durant proposed "The Guests and Visitors"; and Mr. Warren (Leeds), in reply, explained that a "guest" paid for his dinner while a visitor did not. Mr. Mark Beaufoy had gone when his toast of "The Press" came round; but Mr. Pearson took it up, and complimented the trade and other journals. Mr. J. J. Mills eulogised "The Officers of the Society," and Mr. Henley Smith, their accountant, gave thanks. There was a good musical programme, conducted by Mr. Crudge.

### BRISTOL PHARMACEUTICAL ASSOCIATION.

The annual dinner of this Association was held at the Royal Hotel, Bristol, on Wednesday evening. Mr. G. T. Turner presided, and there was a large company, including visitors from Bath, Exeter, Salisbury, and other places.

The toast of "The Pharmaceutical Society" was proposed by Dr. Hancock, who narrated its history, and said its value to the medical profession was undoubted. But the art of prescribing was now, in his opinion, in danger of extinction by the penny-in-the-slot system of elegant pharmacy, as it had been termed. This system had its benefits, but it had

drawbacks. It tended to cripple the abilities of both dispenser and prescriber. There was an art in prescribing, which, he feared, would become lost. It had the further danger that the public, through these media, could get drugs in which there was insidious danger. Another growing system was that of foisting samples upon the prescriber. It was getting an unmitigated nuisance. If his humble words should reach the sample-fiends, he hoped they would leave him out of their category altogether. (Laughter and applause.)

Mr. S. R. Atkins (Salisbury) responded. He said that the whole inception and growth and the strong position the Society occupied to-day had been accomplished within his own recollection. The Pharmaceutical Society was, what as yet the University of London was not, both a teaching and an examining body. He narrated some of the things the Society had done, dwelling particularly on the Benevolent Fund. Referring to recent legislation, he said its whole object had been what he might term the open door—he did not mean that commercially: the very opposite of it—but for the incorporation of all the members of the craft. (Applause.) The supineness and inertia of pharmacists was disappearing rapidly. (Applause.) Men were now responding to the call made with a quickness and loyalty charming to those who had worked for long years under depressing influences. He made eloquent reference to the late Mr. Stoddart, the late Mr. G. F. Schacht, and the late Mr. Giles, adding that pharmacists of to-day were the inheritors of the traditions and influence of men who had done much to make the study of pharmacy very conspicuous. (Applause.)

Mr. Atkins subsequently proposed "The Medical Profession," to which Dr. Shingleton Smith responded.

Mr. B. Allen proposed "The City and Trade of Bristol," and Mr. J. R. Bennett replied; and Mr. B. John, of Bath, expressed the wishes of the company for the success of the Bristol Pharmaceutical Association, which he suggested should be extended so as to include Bath. Mr. Keen, the Hon. Secretary, said the question had been considered, and it would do a lot of good.

### BURNLEY CHEMISTS AT DINNER.

The Burnley Chemists' Association had a dinner at the Bull Hotel, Burnley, on Tuesday evening. About fifty were present, and Mr. J. A. Heaton (President) was in the chair. Among the visitors were Alderman Gibson (ex-Lord Mayor of Manchester), Dr. Symes (Liverpool), Mr. G. T. W. Newsholme (Sheffield), Mr. E. Evans, jun., J.P. (Liverpool), Mr. J. Rymer Young (Warrington), Councillor Critchley, Mr. R. Lord Gifford, Mr. Holt, and others from Blackburn, Mr. R. C. Cowley (Liverpool), Councillor Shorrocks (Accrington), and Drs. Rillon, J.P., and Mackenzie.

The toast of "The Burnley and District Chemists' Association" was proposed by Mr. Edward Evans, who enlarged upon the good of such associations in promoting good feeling and fellowship, and maintained that there was still a good future for the educated pharmacist. What was needed was a certain amount of protection, and he hoped they would achieve it.

Mr. Collins (Nelson) and Mr. J. Brown (Secretary) responded. The latter criticised a certain journal which had tried to cudgel Mr. Lord Gifford. But he thought everyone would agree that Mr. Gifford had scored. He thought that journal had turned the ridicule upon itself, and there was no true sympathy with chemists expressed in its paragraphs. He had last week interviewed their M.P. (the Hon. P. Stanhope), and pointed out to him the facts in regard to the matters affecting chemists. He said they should associate, deputate, federate, and every other "ate," and not stop there, but wait upon the Government and try to get them to take up a measure or give it their support. If it were a tangible Bill, the hon. member was sure it would be an unopposed measure, or practically so.

To the toast of "Pharmacy," proposed by Mr. Lomax (Burnley), Mr. Rymer Young replied. He said they were beset with evils, but their successes were as many as their failures, and, any way, competition was common to all callings. What pharmacists protested against was the piracy, the distinctly illegitimate and reprehensible practice known as company-pharmacy. A man who had served three or four years, and gone in for the mastery of his business,

was distinctly handicapped when at the moment of his qualification he could be opposed by the most ignorant grocer who shamelessly assumed the name of chemist.

Mr. Gifford (Blackburn) proposed "The Pharmaceutical Society," the constitution of which he held was almost a type of what a professional organisation ought to be and backed by its proper constituency its power would be overwhelming against improper encroachment. During the year their Council had risen to a higher level, and been more truly dignified, than at any previous time. It had clearly and unequivocally voiced the sentiment of the rank and file and of common sense. At the same time they believed it would be better advised in adopting a more open attitude with the people it represented. He believed that the parasitical literature which had been so long tolerated had been a very grave and insidious evil. They had the ludicrous spectacle of a journal, the management and editing of which was undoubtedly the most perfect attainable, reduced to the imbecile cackle of the argumentless. They all protested against the parasitic press, which usurped their good name, wore their clothes, and ate their bread.

Mr. Newsholme, in reply, referred to the Pharmacy Amendment Act, 1898, and the poisons regulations. They had now got on the right side of the Privy Council, and might get a few other poisons, as well as carbolic acid, added to the poison-schedule.

Dr. Symes said if the proposed Bill were passed in its entirety, notwithstanding its imperfections, it would tend towards making their calling what it should be. He made a strenuous appeal for organisation.

The Blackburn friends having to leave early, Mr. Holt and Councillor Critchley expressed their thanks to the Brnley Association for the evening's hospitality.

Mr. J. A. Barlow submitted "The Medical Profession," for which the doctors present replied; and Mr. R. C. Cowley replied for the "Federation of Pharmaceutical Associations," which Councillor Shorrock proposed.

## Trade-Marks Applied for.

Anyone who objects to the registration of a trade-mark must address the Comptroller-General, Patent Office, Chancery Lane, W.C., within a month of the date of publication.

(From the "Trade-marks Journal," March 8, 1899.)

"MARIANNIS"; for natural mineral-waters. By H. L. Davis, Kilburn, N.W., silk-merchant. 219,149.

Device of the hyssop-plant and the word "Hyssop"; for detergents, heating and lubricating oils. By T. Hedley & Co. (Limited), Newcastle-on-Tyne, soap-manufacturers. 219,552.

Device and words "MAILED FIST"; for a detergent. By C. C. Ford, Walthamstow, manufacturing chemist. 219,983.

Design of two labels, one in German, the other in French, each with a picture of Julichs-Platz, Cologne, and facsimile signature of "JOHANN MARIA FARINA"; for eau de Cologne. By Johann Maria Farina, gegenüber dem Julichs-Platz, Cologne, distillers of eau de Cologne. 218,428 and 218,429.

Picture of Eiffel Tower; for perfumery and toilet-articles. By Howarth & Co., Tottington, near Bury, soap and chemical manufacturers. 219,901.

(From the "Trade Marks Journal," March 15, 1899.)

"ORDITE"; for gold-paint. By A. Leete & Co., Southwark, S.E. manufacturers. 219,971.

"SIRDAR" (the essential particular) "DIRECT DYE"; for aniline dyes, mineral and non-mineral. By D. Misell, Basinghall Street, E.C., aniline-dye merchant. 220,211 and 220,212.

Picture of five birds sitting in a row; for a medicinal remedy for birds. By Spratt's Patent (Limited), Bermondsey Street, S.E., manufacturers. 220,207.

Designs of two oval and two square labels, two of which have pictures of the Vichy thermal-springs, the other two bearing directions for taking the lozenges, and other wording. The essential particulars in each case are the combinations of devices; for lozenges made from Vichy Salts. Also a combination of devices (the essential particular) for two square labels of similar design; for Vichy Salts. By La Compagnie Fermière de l'Etablissement Thermal de Vichy, Paris and Vichy, merchants. 219,692, 219,693, and 219,694.

## Trade Notes.

MESSRS. JAMES BURROUGH (LIMITED), Cale Street Distillery, Chelsea, are now on the telephone, their number being "Kensington, 272."

MESSRS. C. J. HEWLETT & SON, Charlotte Street, E.C., have prepared a card on which are given coloured facsimiles of bottles of mist, pepsine co. c. bismutho and liq. santal. flav. cum buchu et cubebâ (their original preparations). Chemists who have not seen the card can get a copy on application to the firm.

POISONS REGULATIONS SHOP-ROUND.—The annexed engraving represents a shop-round, made by Mr. W. Toogood, Burlington Buildings, Heddon Street, W., to meet the new regulation in regard to the storage of poisons. The bottles are made of white glass, in six sizes (from 8 to 48 oz.), and take a gold label. It will be noticed that the bottles are fluted, and while in appearance they do not look to the customer like a danger-signal, to the chemist they have the distinguishable torch which the law requires.

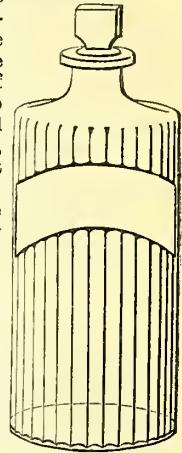
NEW TABLOIDS, compounded of sub-nitrate of bismuth and Dover's powder ( $2\frac{1}{2}$  gr. of each in each tabloid), are the latest addition to Messrs. Burroughs, Wellcome & Co.'s list. The combination of bismuth with ipecacuanha and opium has been found to give relief in dyspepsia and in irritable conditions of the stomach. In diarrhoea and dysentery good results are often obtained by the administration of frequent small doses of these drugs in combination.

BOTTLES FOR LINIMENTS, EMBROCATIONS, AND LOTIONS.—Messrs. Ayrton & Saunders, of Liverpool, send us a sample of their round fluted poison-bottle, made in cobalt-blue glass, with longitudinal corrugations on one half of the bottle, and a plain front, saving the word "Poison," which is in relief. The same style of bottles is also employed by the firm for use as shop-rounds, and it is these that we illustrate.

MERCK'S "DIGEST," No. 2, is devoted to the chemical constitution, physiological action, and pharmacy of digitoxin. A copy of it can be obtained by any chemist from the firm's office, Jewin Street, London, E.C., or from headquarters at Darmstadt.

"PHARMACEUTICAL FORMULAS" is a "knock-out."—Laconic P.S. to a subscriber's letter.

TO AMUSE PATIENTS.—A correspondent sends the following to the *Medical Press*:—During the period of convalescence it is sometimes a difficult matter for the practitioner to propose a form of amusement suitable to the patient's class of illness. I venture to suggest the following as a help in the complaints indicated:—Insomnia, nap; phlebitis, hide-and-seek; measles, billiards (spot barred); St. Vitus's dance, leap-frog; galloping consumption, the race-game; dipsomania, draughts; pruritus, rubber of whist; torticollis, cricket; abscess of lachrymal sac, puss (pus) in the corner.



# “SANITAS” EMBROCATION

In bottles to retail at  
8d., 1/-, and 2/6.

# “SANITAS” AND OTHER

# DISINFECTANTS

SULPHUR FUMIGATING CANDLES (Kingzett's Patents)  
6d., 9d., and 1/- each.

PRESERVED PEROXIDE OF HYDROGEN  
(Kingzett's Patent).

MOTH PAPER, BLOCKS AND CRYSTALS,  
WEED DESTROYER, &c., &c.

THE SANITAS CO., LIMITED, BETHNAL GREEN, LONDON.  
AND 636-642 W. 55 STREET, NEW YORK.



# SPRATT'S PATENT Dog Cakes

SUPPLIED TO  
NANSEN  
EXPEDITION.

# “HIPK.”

This Essence will keep for about a week after the Tin has been opened.

# A PURE MUTTON ESSENCE.

Can be obtained from all Chemists, Grocers, &c., in 4-oz. Tins, price 1s.

SOLD WHOLESALE BY

GEO. NELSON, DALE & CO., Ltd.  
14 DOWGATE HILL, LONDON, E.C.

Several PROSECUTIONS having taken place recently for short weight

# SEIDLITZ POWDERS,

It behoves Chemists to see that they have them accurately hand-weighed.

# HORA'S P.B.

HAND-WEIGHED GUARANTEED.

PRICE **4/3** PER GROSS,  
although having an enormous sale, have never been the subject of a prosecution.

47 MINORIES, LONDON.

LARGE STOCKS  
CASCARA PREPARATIONS  
AND BARK ALWAYS ON HAND.  
**CASCARA, B.P. '98**  
JOHN MOSS & CO.  
(THE GALEN MANFG. CO., LTD.)  
WILSON STREET,  
GALEN WORKS,  
LONDON, S.E.

# JEWSBURY & BROWN'S

BY ROYAL

WARRANT OF

APPOINTMENT

TO HER

MAJESTY

THE QUEEN



# TABLE WATERS

ARDWICK GREEN, MANCHESTER.

# PUREST IN ENGLAND.

# BOURNE

SODA, SELTZER,  
LITHIA, POTASH, LEMONADE,  
GINGER ALE, &c.

Supplied in Six Dozen  
Cases,  
Carriage Paid by

# TABLE

Analysis, &c., on  
Application.

R. M. MILLS & CO.,  
BOURNE,  
LINCOLNSHIRE.

# WATERS

West End Agents, WHEATLEY & SONS, 24 South Audley Street, W.  
And of all Chemists, Wine Merchants, Hotels, &c.

# MELLIN'S FOOD

For INFANTS  
and INVALIDS.

“Trifles make perfection, but perfection is no trifle.”



If you aim at perfection, use

# Fletchers' Concentrated Liquors.

# The Privy Council's Poison Policy.

“THE Privy Council, while not thinking it expedient to include carbolic acid in the schedule of the Pharmacy Act, are of opinion that regulations should be made in regard to its sale, and they have prepared a Bill for that purpose.”

So said Mr. Jesse Collings in the House of Commons, on Monday, March 13, in reply to a question put by Dr. Farquharson. It is a wonder that any man in a responsible position should have the hardihood to stand up in the British Parliament to make this lame old excuse for the Privy Council's continued negligence of duty. Year after year the same excuse for inaction is given. There are some permanent officials, we presume, at the Privy Council Office who have resolved that carbolic acid shall not be scheduled. For years that substance has maintained the premier position on the Registrar-General's list of poisons. Opium and all the soothing syrups and decoctions we know of come in a bad second to it; arsenic, prussic acid, oxalic acid, strychnine, chloral, and corrosive sublimate, all counted together, do not total to the half of the annual record of carbolic acid. And there is nothing which could be more conclusively proved than that this substance owes its deadly pre-eminence simply and entirely to the fact that it is not a legal poison. It can be sold by any one, in any kind of vessel, with or without a label, with no sort of formality, and without a question being asked. Every Session some member of Parliament, more or less familiar with these facts, puts a question to the Home Secretary. Every Session some unsophisticated Minister, coached by the Privy Council, and only anxious to politely dispose of his questioner, deals out this perennial answer. This farce has been going on for twenty years at least. The Privy Council have twice in that period printed a ridiculous Bill, which, if passed, would have made matters worse. Are members of Parliament aware that in 1868 the Privy Council were entrusted with the duty—were, we should say, charged with the duty—of sanctioning the addition to the Poisons Schedule of any substance of this kind which might grow to be a public danger? Are they aware that the Privy Council could probably prevent a hundred cruel deaths a year by a stroke of the pen? Are they aware that the proposal to add carbolic acid to the schedule has been several times brought before the Privy Council in due form and that their august Lordships have never yet even given a reason for their refusal to carry out so obvious a part of their duty?

We cannot altogether exonerate the Council of the Pharmaceutical Society from a share of responsibility for this neglect. It is true that once every five years or so they have languidly directed the attention of the higher authorities to the desirability of declaring carbolic acid to be a poison. But knowing intimately, as they do, how serious a danger this substance has become to the nation, they ought not to have rested satisfied with merely performing their statutory duty. The almost unanimous sentiment expressed by members of the House of Commons on this very subject when the Privy Council's Bill was being opposed last summer ought to be sufficient to convince them that by persistent action the intentions of the Pharmacy Act could be accomplished in spite of the obstinate officials at Whitehall. The Council could easily secure the support of the majority of medical men, of coroners, and, indeed, of the educated classes throughout the kingdom. They could show that the sale of carbolic acid is carefully restricted in Ireland and in all the British colonies, and the Privy Council would have found it hard to say why Great Britain alone should be left unprotected. If they were to induce a dozen members of Parliament to dog Mr. Jesse Collings with a question on the subject once a week, the contest could be won. The Vice-President of the Society, in an after-dinner speech at Burnley, since this statement was made, complacently counts the coming scheduling of carbolic acid among the triumphs of his Society. It is time for him and his colleagues to put some backbone into their demand.

## A New Cocaine Isomeride.

THE last number of the *Berichte der Deutschen Pharmaceutischen Gesellschaft* contains an important paper by Dr. Fritz Günther on Mr. Henry McLagan's well-known reaction for the cocaine which is now in the B.P. We have already called attention to the diversity of opinion in Germany regarding the value of this test as an indication of the purity or impurity of cocaine. It is maintained by one section that the milkiness produced in a 1-per-mille solution of impure cocaine hydrochloride does not necessarily indicate impurity, such as isotropyl cocaine. Dr. Günther does not actually discuss this part of the subject; his investigations lead him to the conclusion that the salts of cocaine, as generally found in the market, and as hitherto obtained, are not solely a compound of the alkaloid cocaine with an individual acid, but that the cocaine is associated with an isomeric alkaloid, which has the same physiological action as cocaine, but differs from it in its melting-point. Pure cocaine hydrate melts at 97° to 98° C., while the melting-point of the new base is 110° to 111° C. There is, further, a very remarkable difference between the two bases, for whereas hydrochloride of the isomer even in 1-in-2,500 solution gives the McLagan ammonia reaction quickly and distinctly, a 1-in-1,000 solution of cocaine hydrochloride does not give any crystallisation whatever on addition of ammonia as prescribed by the test. On the other hand, if to this 1-in-1,000 solution of cocaine a trace of the isomeride is added, crystallisation is immediately produced by ammonia. Dr. Günther's conclusion is, therefore, that the crystallisation observed in the McLagan reaction is not due to cocaine at all, but to the isomeride, and he further adds that it is also a question of relative solubility. The true solubility of pure cocaine according to Dr. Günther is 1 in 704 of water, while that of the base with 111° melting-point is less—viz., 1 in 2,500 to 1 in 3,000 of water at 20° C. Dr. Paul gives 1 in 1,300 of water as the solubility of cocaine, which is not inconsistent with Dr. Günther's statement that cocaine is a mixture. The salts are much more soluble, and as the proportion of the hydrochloride prescribed for the reaction is 1 to 1,000, it follows that the crystallisation from commercial salts must be due to separation of the isomeride base. In fact, Dr. Günther proves that the solution of cocaine hydrochloride, free from the isomeride, does not yield any crystallisation. It is to be hoped that Dr. Günther will carry his investigation further, although, as far as we can gather from his paper, he gives conclusive evidence that the isomeride is a distinct body, since he made observations not only upon the melting-point and solubility, but also upon its opticity and the composition of the gold chloride double salt, and the behaviour of the picrate as compared with the corresponding salts of pure cocaine. He also assured himself that the hydrochloride of the isomeride yielded no other organic acid than benzoic acid.

To prevent any misunderstanding arising from this account of Dr. Günther's research, we ought to add that it does not affect at all the characteristics of impure cocaine salts as shown by the McLagan test. As already pointed out, salts of pure cocaine immediately give a crystallisation when ammonia is added to the solution, without leaving the slightest opalescence or milkiness. It is this milkiness which indicates the presence of objectionable alkaloids or amorphous bases. There is now very keen competition in the production of cocaine salts, which are largely prepared from the crude and highly impure alkaloid made in Peru. Hydrochloride which looks beautiful can be produced which gives the milkiness, and such samples should be rejected.

## Lewis & Burrows's Profits.

THE shareholders in Lewis & Burrows's Drug-stores (Limited) may think that the promise of a dividend on the ordinary shares at the rate of 3 per cent., in addition to the payment of the full 6 per cent. dividend on the preference shares for the year 1898, is a hopeful sign. Since the company was floated in 1895 one dividend of 1s. per share (5 per cent.) has been paid to the holders of the ordinary shares, and nothing whatever has come to them since. The accounts now presented are not very clear, but, showing as they do that the net profits of the past half-year were only 224*l.* (out of twenty-two shops—10*l.* per shop!), it would certainly seem that even the 1*½* per cent. now offered to the ordinary shareholders—3*½* d. per share or thereabouts—is scarcely justified by the financial condition of the company.

The company was floated in March, 1895, with eleven businesses, and it was certified that in the then preceding year the profits of those businesses amounted to 7,552*l.* 10s. It was stated that since the books had been closed the sales of those businesses had shown "a very considerable increase," and the directors "confidently anticipated" that those profits would be "substantially increased." It was shown that even out of those profits 6 per cent. could be paid on the preference shares, 10 per cent. on the ordinary shares, and that a balance would still be left of 2,862*l.* 10s. The company now own twenty-two businesses; these, with goodwill, fixtures, fittings, furniture, movable plant and utensils, and stock-in-trade, they value at 82,530*l.* 15s. 10d. They have, besides, rather more than 5,000*l.* in cash and in book-debts, while they owe a little over 10,000*l.* Their net profits for the first half of 1898, as shown by their profit-and-loss account of June 30 last, were 1,499*l.* 15s. 5d., and this sum included an item of 361*l.* 9s. 9d. as the net realisation of the sale of the lease of 67 Piccadilly.

From the statement of accounts just published it appears that the net profit made in the half-year ending December 31, 1898, was 224*l.* 11s. 7d.; this, with the amount made in the previous half-year, gives a total profit for the year of 1,721*l.* 7s. The dividend on the preference shares absorbs 1,499*l.* 14s., and leaves 221*l.* 13s. to be added to 312*l.* 2s. 1d., "balance brought forward from 1897," and out of this the 1*½*-per-cent. dividend on the ordinary shares (other than the vendors') will be paid. There are 49,890 fully-paid ordinary shares, and of these we believe about 18,000 are vendors' shares, so that the dividend will nearly absorb the whole of the money available.

An interesting item appears in the balance-sheet as follows:—"Add surplus on re-valuation of movable plant, 238*l.* 5s. 3d." How this lucky find may have been discovered, we do not know; but, on comparing the items allowed for depreciation in this and previous balance-sheets, it will be observed that a sum nearly 200*l.* less than the average is this time thought sufficient to debit the profit-and-loss' account with, and it is likely that the surplus alluded to may have been thought to justify this. But even if 224*l.* has been really made in the past six months, it is difficult to see where the "most satisfactory results" indicated by the directors come in. It looks as if the ordinary shareholders must accept their 3*½* d. per share as, to use an ominous phrase, a second and final dividend, and we should think a re-transfer of the shops to private ownership would accomplish better results than the proposed change of the name of the company.

### THE IMPERIAL PHARMACOPÆIA.

We have received from the editor of the British Pharmacopœia a copy of the report on the proposed Indian and

Colonial Addendum, which has been revised and an index added since we first noticed it in December last. We understand that a copy of the report was sent ten days ago to each of the chief officers of medical and pharmaceutical bodies, and to other medical and pharmaceutical authorities in India and the British colonies. No fewer than 800 copies were thus sent in all, and seventy-five British dependencies have been reached either directly by the General Medical Council or indirectly through the Indian and Colonial Offices. Authorities are asked to express their views in regard to the draft Addendum, additions, omissions, and alterations especially being invited; while anyone who thinks that the British Pharmacopœia, as it is, suffices for medical and pharmaceutical requirements in the part wherein he resides, is asked to so inform the Medical Council. It is thus evident that the Pharmacopœia Committee and Dr. Attfield (the editor) are thoroughly in earnest regarding the Imperial Pharmacopœia; indeed, it will be seen that they have already done practically what we last week suggested should be done. As believers in the desirability of the British Pharmacopœia being made the standard of authority for the British Empire, we trust that the response to Dr. Attfield's circular will be complete in every respect. The work involved in collating the replies will be very considerable, and undue haste in preparing the Addendums for publication is to be avoided.

### TAXING THE HOARDINGS.

The Society for Checking the Abuses of Public Advertising has lately had a correspondence with the Chancellor of the Exchequer urging him to tax exposed advertisements by means of a stamp, as in France. The Honorary Secretary of the Society, Mr. R. Evans, stated that in France the stamps on *affiches* amounted in 1897 to nearly three and a half millions of francs, and he suggested that a still larger sum would be realised here. The Chancellor of the Exchequer replied that he could only regard the matter from a point of view of revenue, and in that aspect he did not see on what ground a tax on advertisements could be defended, unless newspaper advertisements were included. He did not think it necessary to dwell on objections that would certainly be raised by such a tax. The Secretary, in a further letter, replied, pointing out the distinction that a newspaper was voluntarily purchased, while the advertisements proposed to be taxed are forced upon the attention of citizens in the public thoroughfares. There may be very good reasons against taxing placards, but surely the one alleged by Sir M. H. Beach is a weak one.

### MATCH-MAKING REPORT.

A hulky Blue-book has just been published on the use of phosphorus in the manufacture of lucifer-matches. It embodies the reports of Professor T. E. Thorpe, LL.D., F.R.S., Principal Chemist of the Government Laboratory; Professor Thomas Oliver, M.D., F.R.C.P., Physician to the Royal Infirmary, Newcastle-upon-Tyne; and Dr. George Cunningham, M.A., D.M.D., Senior Dental Surgeon to the London Hospital; who were appointed by the Government last year to investigate this subject. They visited France, Belgium, Holland, Norway, Sweden, Denmark, Germany, and Austria to see how matches are manufactured there, and they also had information from Russia, Italy, Switzerland, and the United States. Full inquiry was also made at home. The Blue-book deals fully with all aspects of the subject; an introduction by the Chief Inspector of Factories sets forth the origin and scope of the inquiry; and the next most important part of the book is Professor Thorpe's report, in which he writes upon the properties of phosphorus, the nature of phosphorus "fume" (it is a mixture of phosphoric and phosphorus oxides and phosphorus), and its action, as well as that of phosphoric acid, on the

teeth. Then follow accounts of the match-factories of this and other countries, including many interesting engravings of apparatus. Professor Oliver's report deals with the physiological and pathological effects of phosphorus, while Dr. Cunningham's is concerned solely with the effects upon the teeth. Here, again, valuable technical details are given, Dr. Cunningham's report taking up 114 of the 236 foolscap pages which the report runs to. It is published by the Queen's printers at 4s. 11d.

#### PHARMACY-ACT PROSECUTION IN QUEENSLAND.

Enforcing the Pharmacy Act in the colony of Queensland seems to be a costly business. A case is reported in *The Chemist and Druggist of Australasia*, in which the defendant lived at Croydon, North Queensland, and it was thought necessary for the Registrar under the Act to go from Brisbane to give official evidence. The defendant's solicitor, in commenting on the application for costs, argued that it was not necessary for the Registrar to have come. No doubt he would quite as willingly have argued the other way if the Registrar had not come. But the striking fact in connection with the case is that it involved a journey of 4,000 miles and the absence of the Registrar from his office for six weeks. The total amount realised by fine and costs was about 16*l.*, and this was not net.

#### AGRICULTURAL SULPHATE OF COPPER.

The report of the Chemical Committee of the Royal Agricultural Society presented at the last meeting calls attention to the fact that sulphate of iron coloured blue with Prussian blue is being sold to farmers under the name of "Agricultural Sulphate of Copper." An instance is given in which a member of the Society went to a local pharmaceutical chemist and asked for sulphate of copper, for which he paid 3*d.* a pound for 20 lbs. Dr. Voelcker analysed it, and found it consisted of sulphate of iron 90.94 per cent., sulphate of copper 9.02 per cent., and insoluble matter .04 per cent. In the correspondence which followed the chemist endeavoured to justify himself by saying that sulphate of copper was an article of very variable composition, and that no maker will guarantee its quality. Commercial pure sulphate of copper is an easily obtainable article, and is sold on the basis of containing 98 per cent. crystallised sulphate of copper, and there can be no excuse for selling such a grossly adulterated article as that mentioned in the above case. From the way the expression "local pharmaceutical chemist" is used, however, it is doubtful if it was a chemist's shop from which the article was obtained. We hope it was not.

#### DENTAL ADVERTISING.

The editor of the *British Dental Journal* has obtained the sympathy and promised support of the *Lancet* in an attempt to put down dental advertising. It appears that the Royal College of Surgeons of England, whose dental diploma is perhaps the most highly appreciated in the country, possesses no disciplinary powers in regard to their dental licentiates, from whom they cannot and do not require any undertaking not to advertise. This will be news to most people, for the majority of English L.D.S.'s have always been careful not to advertise more than by a card or by means of the brass plate and red lamp. The Irish College of Surgeons possesses disciplinary powers, and it is well known that that college has not been slow to use the powers against individuals in England at the solicitation of English registered dentists.

#### CONTINENTAL REPORTING.

The following is a literal translation of the opening paragraph of the report of an important professional meeting, which we take from a Belgian journal:—

On the 26th of last month the General Pharmaceutical Association held a meeting at the Hotel Ravenstein, under the

presidency of Professor Rawez. The assembly was neither more or less numerous than usual, about twenty-five members being present. As soon as the session began a discussion arose and lasted for a long hour on— But no, we will keep a discreet silence, and will not make known what was said, for fear of giving the "secret de Polichinelle." Moreover, we have promised ourselves that we would give an incomplete report of this meeting as a means of avenging ourselves on those who neglected to attend. This little malice satisfied, we may say that about 3.30 the President commenced to read the correspondence, &c.

Reporting is not one of the things they do better abroad.

#### MEDICINAL TINCTURES AND SPIRIT EXPORTED.

The export trade in these tinctures, &c., continues to grow. Last quarter drawback was allowed by the Excise on 22,375 gals. of proof spirit which they contained—being an increase of 3,354 proof gals. over the corresponding quarter of the previous year. Altogether the first three quarters of the current financial year, show an increase of 7,070 proof gals. on which the duty has been repaid. The promised new order simplifying and extending the privileges under which these allowances can be claimed will, it is hoped, be issued very soon, and will no doubt tend still further to increase the export trade in these articles.

#### APPRENTICES WANTED.

The dearth of apprentices all over Scotland continues. Probably more than half of the best businesses want them, and cannot get them. Finely-fitted pharmacies will not attract them, and promises of exemption from drudgery afford no inducement. Parents, an all-important element in the situation, are apprehensive of the increasing stringency of the examinations. There is a pretty general feeling that it will be a pity if in our levelling-up process we should gradually find ourselves improved out of existence. Also that with it all we are not making for better dispensers, better pharmacists, or, what is perhaps most important, better salesmen.

#### THE PUBLIC ON POISON-BOTTLES.

A number of the morning and evening newspapers have during the past week mentioned the fact that we are offering 5*l.* 5*s.* in prizes for poison-bottle ideas, with the result that almost every post is bringing us notions from outsiders. Ladies appear to be particularly desirous to relieve us of some of our guineas, while one or two military officers, and some well-known scientific men outside pharmacy, join in with pure desire to benefit humanity. All come in after March 10, so our subscribing competitors may breathe freely. It is curious to note that ladies' suggestions appeal to the eye, and luminous paint is what strikes them as being a sure preventive of accidents with poisons. Most of the correspondents, however, suggest excruciatingly teasing bottles, with the neck in all sorts of impossible and ungetatable places. One gentleman, for whose abilities as a scientist we have a high respect—indeed, his name is known the wide world over—points out to us the advantages of the ordinary salad-cream bottle as a receptacle for poisons; and an equally daring suggestion comes from several—viz., that the cork used for poisons should be a screw-stopper similar to those now so commonly used for beer and aerated-water bottles. We are much obliged to these contributors, and regret that we cannot address each one individually; but should any of our subscribers be anxiously asked by customers about the distribution of the guineas, they will oblige us by telling them that they were intended solely for the hard-working class of men whose livelihood has been imperilled by the stores. These outsiders have supplied the little that was needful to convince us that the care of the chemist in actually conducting sales of poisons is of equal importance to distinction in the receptacle, for to prevent mishaps it seems to be as necessary to put an idea into the head of a customer that an article supplied is dangerous, as to put the article in a receptacle which shows itself to be a danger-signal.

## Legal Reports.

### Sale of Food and Drugs Act.

#### SWEET SPIRIT OF NITRE.

May's Drug-stores (Limited) were the defendants in a case heard by Mr. E. S. Fordham at North London Police Court on Monday. The Hackney Vestry were the prosecutors, Mr. H. T. Tiddeman appearing for the Vestry, and Mr. Abinger for the defence. The allegation was that at the defendants' branch at 60 High Street, Stoke Newington, they had sold sweet spirit of nitre which was deficient of its active principle (ethyl nitrite) to the extent of 65 per cent. Evidence of the purchase was given by two sanitary inspectors, one of whom gave 6d. for the ounce-bottle, and then divided it into three equal parts.

Mr. Abinger's defence was that the spirit had not been properly handled after being purchased. It had been put into a large white glass bottle, and exposed to the light, and shaken about. The drug should have been in a blue glass bottle and at once taken to the analyst; whilst on the face of the certificate it might have been on any day between February 15 and 23. "Allen's Commercial Organic Analysis" showed what should be done to keep this spirit from deteriorating. Besides, the constant opening of the shop-bottle would tend to evaporation. A sample had been taken from the stock-bottle, and this was found to be practically correct. But if the spirit was put in a bottle, with air-space, decomposition rapidly took place. There was no suggestion that the spirit was adulterated with water. The issue was how long was allowed to elapse between the taking of the sample and the analysis. He had evidence to show that it would considerably depreciate in twenty-four hours. This sample, as he had said, was taken on February 15, and the certificate of the analyst was dated February 23. There were two courses open to the Magistrates: to hear the experts on the subject and dismiss the summons, or to disbelieve them and convict.

Mr. Tiddeman: There is a third course. You might send the third portion of the sample to Somerset House.

Mr. Abinger: That would be no good.

Mr. Tiddeman: Not to you. (Laughter.)

Mr. Abinger: Nor to anybody else.

Mr. Evan Thomas Owen, chemist by examination, who served the sample in question, said the sweet spirit of nitre was purchased of Baiss Brothers, of Jewry Street. They kept it in dark-blue glass bottles. The bottle, when the inspectors called, was about one-third full. It was a glass-stoppered bottle. After the inspectors left he sent a 1-oz. sample from the same bottle to Messrs. Baiss Brothers. This bottle was filled up to the neck, corked, and wrapped in corrugated brown paper. This was in a white glass bottle.

Mr. Abinger: If evaporation takes place in the shop-bottle, why does it not in the stock-bottle?

The Witness: Because the latter is placed in an inverted position in a dark cellar. The sample I sent to Baiss Brothers was from the shop-bottle. The shop-bottle was a white glass one exposed to the light, with a glass stopper, and about one-third full. It had only been filled a few days previously. Usually it was filled once a month.

By the Magistrate: The shop-bottle was opened on an average about twice a day, but sometimes not at all. I filled it a few days previously from the bottle in the cellar. There was a considerable vacuum in the shop-bottle, but the vacuum in the bottle in the cellar was minimised by inverting the bottle and having the weight of the spirit upon the stopper. The nitre, however, can be always kept up to B.P. strength if in a glass-stoppered bottle.

The Magistrate: How do you account for this deterioration from the sample-bottle? You don't say it was owing to anything else—not because of the vacuum, not because of the white bottle, not because it was exposed to light—but because it was not in a glass-stoppered bottle. How do you, Mr. Abinger, make this agree with your opening remarks?

Mr. Abinger: I was not prepared for such evidence. My instructions are that light and air considerably deteriorate the spirit, notwithstanding the stopper.

Mr. Geo. Elliott Shaw, F.I.C., said he examined the third portion of the sample left by the inspectors, and practically

agreed with the certificate of the Public Analyst. The decomposition of the spirit in a bottle such as his portion was in would gradually increase. It would be more rapid in a bottle in which there was a vacuum. He received another sample from Messrs. Howard, who supplied Baiss Brothers, and that was full strength. It was possible for the nitre in the shop-bottle to have deteriorated to the extent of 65 per cent. in the few days that intervened between the filling from the stock-bottle in the cellar. The vacuum and the light would be important factors in the decomposition.

Mr. Abinger: A good deal of the mischief would be done in dividing this sample between the three bottles—pouring from one bottle into another—the same operation thrice repeated. Would you say that the spirit might have been pure when sold, but that it became deteriorated by this operation of division?

The Witness: No doubt the spirit was at one time pure. But the operation of pouring from one bottle to the other would not cause all the deficiency.

Mr. Abinger: And what do you say to keeping the stock-bottle inverted in a dark cellar?

The Witness: It would be a good thing for the preservation of the spirit, because the weight of the spirit would prevent air getting into the bottle, which otherwise cannot be prevented, even with glass stoppers.

The Magistrate: Do you expect very rapid decomposition where there is a considerable vacuum?—Yes, if you call air a vacuum.

Or, if a bottle was one-third full, the evaporation would be greater than if two-thirds full?—Yes, because the vacuum would be greater.

What would the proportion of decomposition be in nitre kept in a white glass bottle on the shelf of a chemist's shop, and opened on an average twice a day?—I could not tell accurately. I should require to know the amount of light and the quantity in the bottle, and other details, before deciding.

Would you be surprised if the decomposition was shown to be 65 per cent. in one week?—If the bottle was opened two or three times a day I should not be surprised.

Mr. Abinger: How can chemists keep their nitre up to B.P. strength?

The Magistrate: I think you had better ask that question privately. This gentleman would want another fee if he gave you advice upon that subject. (Laughter.) And it would depend upon the number of somersaults that the inspector took after he got the sample. (Laughter.)

This was the case for the prosecution.

The Magistrate said he would assume that the nitre as supplied to the defendants by Baiss Brothers was genuine.

Mr. Wilson Hake, lecturer on chemistry and toxicology at Westminster Hospital, and one of the examiners at the College of Physicians, F.O.S., F.I.C., &c., said he examined the contents of a bottle handed him by Mr. Pitman, clerk to Mr. Rawlinson, defendant's solicitor. The bottle contained sweet spirit of nitre. He found it contained 5 87 volumes, or nearly 2 per cent. below B.P. standard. He took a portion and left it for forty-two hours, and found it had deteriorated 1 4 per cent.; and in another forty-two hours a further deterioration had taken place, reducing it to 4 9 volumes.

By Mr. Abinger: The progress of decomposition would not be equal. It would not go on quite so rapidly in the later days as when the spirit was put fresh into the bottle. The shaking of the spirit in putting it from bottle to bottle would promote the decomposition. It was quite possible for the nitre exposed in a chemist's shop in a bottle opened on an average twice a day to decompose to the extent of 65 per cent. in a week.

Mr. Lloyd Howard, a member of the firm of Howard & Sons, manufacturing chemists, of Stratford, who had supplied the nitre to Baiss Brothers, was called, and said that when the article left their works it was up to the standard of the British Pharmacopoeia; indeed, it was above, and left a good margin for decomposition. It was 7 volumes, whilst the Pharmacopoeia standard was 6 1/2. He agreed with Mr. Hake's evidence. It was possible, under some circumstances, for the spirit to deteriorate to the extent of 65 per cent. in one week.

By the Magistrate: And I would not be surprised, if put in a chemist's white shop-bottle, one-third full and exposed on a shop-bracket to the full light of day, that the deteriora-

tion would be considerable. The air can be excluded from the bottle, notwithstanding the vacuum, by rinsing with a little of the spirit. The gas which the spirit gives off rises very rapidly and excludes the air. This would be the case when replenishing the bottle. His firm did not keep the spirit in stock. They delivered it directly it was manufactured.

Mr. Abinger said he would not ask for the attendance of the Public Analyst. But he would ask the Magistrate to consider the conditions under which the drug had been kept. It should have been in a dark bottle in a dark place.

The Magistrate: Which shows me that your clients have not kept it as they should have done. And, put side by side with your opening statement, it looks like carelessness.

Mr. Abinger: It has been sworn that the bulk was supplied pure.

The Magistrate: Yes, and whilst in the stock-bottle in the cellar appeared to be all correct. But this sweet nitre as sold to the inspectors was 65 per cent. deficient in active principle. I am asked to say that this was owing to being put into small white glass bottles and exposed to light and air. I am asked to say also that the deterioration took place after the sale; whilst, again, it is said that the evaporation would take place under the conditions in which it was kept in the chemist's shop. But I find that it was not pure when sold; and, that being so, I must convict. I cannot help saying it is a serious offence. Perhaps I shall be justified in saying it was not adulterated in the ordinary sense of the term; but I find that there was a considerable deficiency of spirit. If it was only due to carelessness it is a serious matter for a chemist to be selling a drug only half its strength to poor people, who have to use the stuff. They buy it in the full belief that it is of proper strength, but they only get half their value for their money, and only have half the supposed virtue. Chemists, with the knowledge of how rapidly the spirit evaporates, should do all that is necessary to keep it up to Pharmacopoeia standard. What do you say as to costs, Mr. Tiddeman?

Mr. Tiddeman: I think I ought to ask for costs beyond the 10s. 6d. for analysis and the 2s. for the summons.

The Magistrate: I shall fine the defendants 10*l.*, and allow 2*l*. 2*s.* costs to cover everything.

Mr. Abinger said he would give notice of appeal.

The Magistrate: Certainly, if you apply in time.

Mr. Tiddeman: Your Worship finds as a fact that the nitre was deficient in strength?

The Magistrate: Yes.

#### CAMPHORATED OIL.

AT Ilkeston Petty Sessions on March 9, Charles Francis Girling, of Sandiacre, was summoned for selling camphorated oil which Captain Sandys, the Inspector under the Act, stated was deficient in camphor to the extent of 50 per cent. Besides that, mineral oil instead of olive oil had been used in its composition. Mr. White, county analyst, said the mineral oil used was worth only 1*s.* per gallon, while olive oil was worth 6*s.* per gallon. The defendant sold it at 2*d.* per oz. The defendant said he sold it just as he received it, and he purchased it as the best camphorated oil. The Bench imposed a fine of 1*l.* and 1*l.* 2*s.* costs.

AT Brentford Petty Sessions, on March 9, John Grainger, general shopkeeper, of St. Margaret's, Isleworth, was summoned for selling to Mr. Walter Tyler, Inspector under the Food and Drugs Act, some camphorated oil which was not of B.P. quality. Mr. Tyler explained to the Magistrates that under the old British Pharmacopoeia camphorated oil might mean any oil which was camphorated, though liniment of camphor meant the B.P. article. But in the new Pharmacopoeia camphorated oil was expressly named. The drug in question was often sold in small bottles at 1*d.* each, and on the sample in question there was the label "Camphorated oil," and he should like to know who put it there. If Mr. Grainger could inform him he would be pleased to assist him. So far as Mr. Grainger was concerned, the drug in question was found in his shop with numerous other articles which were found to be genuine, as had always been the case on previous occasions. The public analyst had in this case found only 12·45 per cent. of camphor

instead of 21·43 per cent., which it ought to have contained, and it was made of cottonseed oil instead of olive oil.

The defendant said that he purchased the oil from Messrs. Tyer, of Southall Place, Borough, S.E., and they had told him that this camphorated oil was made by them before the new Pharmacopoeia came into force. As he had the article in stock he sold it, and had received no complaints.

In reply to Inspector Tyler, the defendant said he purchased the drug in March last.

Inspector Tyler said that as the new B.P. came into force after that month he could not assist the defendant.

A fine of 20*s.*, including costs, was imposed.

#### SWEET NITRE AND CAMPHORATED OIL.

At Skipton Petty Sessions, on March 11, the following were summoned, on the information of Mr. A. Randerson, Inspector for the West Riding County Council, for selling adulterated drugs:—Charles Wade, manager of the Silsden Co-operative Society (adulterated sweet nitre and adulterated camphorated oil); William Mason, grocer, Silsden (adulterated camphorated oil); William Mitchell, grocer, Silsden (adulterated camphorated oil); and William Lister Leake, grocer, Silsden (adulterated sweet nitre).

In Wade's cases a plea of not guilty was made with respect to the sweet nitre, and guilty with respect to the camphorated oil. Mr. Randerson said he purchased samples of camphorated oil and sweet nitre from the defendant on February 4. Mr. A. H. Allen, of Sheffield, certified that the camphorated oil was composed of camphor 12 per cent., mineral oil 38 per cent., and cottonseed oil (or possibly some olive oil) 50 per cent. According to the B.P., it should contain 21 per cent. of camphor and 79 per cent. of olive oil. The sweet spirit of nitre the analyst certified contained nitrous ether 0·48 per cent., alcohol and legitimate water 96·02 per cent., excess of water 3·50 per cent. This was less than one-third of the minimum proportion of nitrous ether required by the B.P., and 3½ per cent. of water in excess of the allowed proportion. The Inspector asked for a heavy fine in the cases, as the society had been convicted before. Mr. Percy Naylor, of Keighley, who represented the Wholesale Co-operative Society, who were the real defendants, did not dispute Mr. Allen's analysis in the case of the sweet spirit of nitre, but pointed out that as the excess of water was only 3½ per cent. it was not such a case as was intended to be met by the Act. Every time the bottle was opened the nitrous ether must evaporate. As to the camphorated oil, there had been a mistake. The chemist who was employed by the wholesale society in Manchester, and who prepared the oil, had since been discharged, and every bottle of camphorated oil in the society's possession had been destroyed. Every precaution would be taken that nothing of the sort occurred again. The bottles of camphorated oil were supplied at 2*s.* 2*d.* per dozen, and sold at 3*s.*, so that the society had no great profit on the transaction. A fine of 5*s.* and costs in each of the two cases was imposed.

In Mason's case the analyst said the camphorated oil contained 10 per cent. of camphor and 90 per cent. of olive oil. The defendant said he had purchased the oil before the new standard was established; and the Inspector added that he did not think the defendant was to blame. Fined 5*s.* and costs.

In Leake's case the nitre was certified to contain nitrous ether 0·39 per cent., alcohol and legitimate water 96·21 per cent., excess of water 3·40 per cent. The defendant said he had had the drug in stock a year, and at the time he purchased it it was guaranteed to be genuine. Fined 5*s.* and costs.

Mitchell's camphorated oil, according to the certificate, contained 17·5 per cent. of camphor and 82·5 per cent. of olive oil. In this case Mr. Wright, barrister, of Bradford, who represented the defendant, pointed out that the case was not a serious one. In the former B.P. camphorated oil was not official. What was recognised was liniment of camphor; but in the new edition the oil was given as a synonym of liniment of camphor. As an instance of the hardship caused by the publication of the B.P. he mentioned tincture of rhubarb. Up to May last year it was essential, according to the B.P., that tincture of rhubarb should con-

tain some saffron. People sometimes omitted to put the saffron in. They were fined for omitting it. But now, because the Committee who were responsible for drawing up the B.P. had decided to leave out the saffron, chemists were prosecuted if they sold any with it in. If dealers had their shops and warehouses full of tincture of rhubarb containing saffron it would all have to be destroyed. Having regard to all the changes—evidently arbitrary changes—on the part of the Committee who had published the book, and to the time that was necessary for dealers to change their stocks, he submitted that the Magistrates might well deal lightly with that case, if not dismiss it altogether. The Bench imposed the nominal penalty of 1s. and costs.

#### MILK OF SULPHUR.

AT Dewsbury, on March 7, the Birkenshaw Industrial Co-operative Society, the Dewsbury Pioneers' Co-operative Society, and Mr. Andrew Armitage, drysalter, Soothill Nether, were summoned in respect of some milk of sulphur they had sold. Mr. Dwyer defended on behalf of the two co-operative societies.

Inspector Crabtree, who prosecuted, stated that milk of sulphur should, according to the British Pharmacopœia, consist of pure sulphur. The sample he purchased from the Birkenshaw Co-operative Stores contained only 24 per cent. of sulphur.

Mr. Dwyer, in defence, contended that what the inspector was served with was what had been known for a hundred years as milk of sulphur.

The inspector said he did not wish to press the case unduly, as it was the first prosecution of the kind brought into that court.

The Bench imposed a fine of 1s. and costs in this and also in the other cases.

At Barnsley, on March 13, Geo. Wood, shopkeeper, Barugh, was charged with selling adulterated milk of sulphur. Mr. J. Carrington, for the defence, said there had been a new issue of the British Pharmacopœia, which changed the form of preparation of milk of sulphur, and the West Riding solicitor, understanding that little shopkeepers could not know of this change, had agreed to withdraw the charge on payment of costs.

#### GREGORY'S POWDER AND EUCALYPTUS OIL.

AT the Pontefract Police Court, on March 13, Frederick Craven, chemist and druggist, Pontefract, was charged (1) with having sold as Gregory's powder an article not of the nature and substance required, and (2) with having sold adulterated eucalyptus oil. Both charges were admitted. The analyses showed that the Gregory's powder contained 69 per cent. of magnesia and 31 of rhubarb and ginger, instead of 67 and 33 respectively; while the eucalyptus oil had a specific gravity of .89 instead of .92. Mr. Craven said the formulas were only altered in the Pharmacopœia on January 1, and he was not aware of the slight change which had been made in the requirements for Gregory's powder. His stock would have been right according to the old prescription. He was not asked for eucalyptus oil three times a year, and he had no idea that it was even so slightly wrong. He added that it was the third time the inspector had called upon him, and his articles which were sampled had always been found right previously. The Mayor said defendant had just placed himself within the Act, but as the Bench did not wish to be hard upon him they would fine him the costs in each case. They would reduce them by the amount charged for the inspector and his assistant (6s. 3d.), while the analyst's fee of 10s. would be reduced to 6s. in each case. Mr. Craven thus had 13s. 9d. to pay on each summons.

#### BICARBONATE OF SODA FOR BORAX.

ON March 14, at Wednesbury Police Court, before the Stipendiary Magistrate (Mr. N. C. A. Neville), Charlotte Tomlinson, chemist, Wednesbury, was charged with selling powdered borax which contained 100 per cent. of bicarbonate of soda. Mr. H. Van Tromp prosecuted, and Mr. J. H.

Stockdale defended. Samuel Toy, assistant-inspector, stated that on January 19 he visited the defendant's shop, which at the time was in charge of her manager, William Rothwell, and asked for 2 oz. of powdered borax, for which he paid 1 $\frac{1}{2}$ d. Mr. E. H. T. Jones, public analyst, having analysed the substance, said he found it to consist entirely of bicarbonate of soda. In answer to Mr. Stockdale, Mr. Jones said he had since received a packet of powdered borax from defendant, and had found it to be genuine. Mr. Stockdale, in defence, urged that the manager misunderstood the order of the assistant-inspector, believing that he asked for crushed soda. The Stipendiary remarked that it seemed to be a case of reckless trading. One thing was asked for and another thing supplied. A fine of 3d. and costs was imposed.

#### County Court Cases.

##### EXPLOSIVE LIME-JUICE.—PROTRACTED LITIGATION.

IN the City of London Court, on Friday, before Mr. Assistant Registrar Tattershall, the Lime-juice and Tamarind Company, 60 Watling Street, E.C., sued Mr. George H. Irish, trading as Tamaris & Co., 110 Fenchurch Street, E.C., for 23l. 9s. 10d., being the balance of an account for cases of lime-juice cordial supplied between April and August last year. The case was first before Mr. Commissioner Kerr on November 16 last, when it was referred to the Assistant Registrar. That official adjourned the case to enable the plaintiffs to appoint a solicitor to represent them, as their case was being conducted by Mr. Palmer, described as their financial manager, the Assistant Registrar making strong comments upon gentlemen other than solicitors attempting to represent litigants in actions. He marked his objection by giving the defendant the costs of the day. The matter then stood adjourned until January 3. It was then adjourned until January 23, when, owing to a medical certificate that the defendant was confined to his bed and unable to attend the court, it was further adjourned until February 23. From some mistake the parties were not ready then, and the case stood again adjourned until March 2, when through a misunderstanding it had to be adjourned once more until Friday, when it was proceeded with. The solicitor representing the defendant said his chief objection to the claim was that the goods supplied were of an inferior quality, and he justified the fact that complaints were not made on delivery by the explanation that it was the practice for the plaintiffs to receive orders from the defendant to send goods direct to his customers. He, moreover, produced a circular of the plaintiffs dated July last, in which they said that owing to a mistake on the part of one of their employes, some wrong mixing had caused a certain quantity of the lime-juice cordial to become of an explosive nature, and that when the customers saw a fermentation going on, they were requested not to interfere with the bottles, but to show them to the firm or their traveller. The defendant said as a matter of fact several of the bottles sent to his customers by the plaintiffs had actually exploded. He had lost several customers, and had sustained loss to about the sum of 12l. In addition the damage to his business had been considerable. The Assistant Registrar said no counterclaim had been raised, so he was unable to go into that. In the course of the hearing, the plaintiff's solicitor produced a letter from the defendant, in which he admitted owing 20l. 15s. 4d. The Assistant Registrar said he did not see how the defendant could get away from this, and eventually gave judgment for the plaintiffs for that amount, with costs.

#### HOUSEHOLD-EXPENSES.

AT the Torquay County Court on March 11, Louisa North sued Mr. F. March, chemist, Torquay, for 8l., being money paid for housekeeping. The defendant counterclaimed for 15l. 13s. 8d.

Miss North, in her evidence, said Mr. March allowed her 2l. a week towards housekeeping, but the expenses were more than that, and the claim was for money she had advanced and for articles belonging to her detained by defendant.

In cross-examination plaintiff denied that Mr. March instructed her not to go beyond 2l. per week. She did not think 2l. was sufficient to keep the house. She had made an

arrangement with the butcher, which, when Mr. March took the business from Mr. Holloway, had been continued. None of Mr. March's money had been spent on drink. She had never sent out any assistants for gin. She had to pawn some of her clothes to keep the house going.

By his Honour: In the week ending July 2 the total cost of the household expenses was 2*l.* 11*s.* for six men. The articles detained were her property, and included an armchair.

Defendant said when he took over Mr. Holloway's business he understood that Miss North had 2*l.* a week for housekeeping. Later on he made a new arrangement with Miss North, whereby he was to allow her 2*l.* 7*s.* a week, but in the event of an assistant leaving it was to be reduced to 2*l.* For some weeks after this the expenses did not go over that sum, but he had no knowledge of the butcher's account, which he afterwards discovered amounted to 31*l.* 7*s.* 5*d.*, and, acting on instructions, he settled the matter by paying the butcher one-half.

After hearing further evidence his Honour said he had a very difficult case to deal with, but gave judgment for plaintiff for 5*l.* 17*s.* 6*d.*, without costs. The counterclaim was dismissed.

#### EXTRACTING THE WRONG TOOTH.

AT Weymouth County Court on March 8, before Judge Philbrick, Mr. Edward Mitchell Smith, chemist and druggist, 34 St. Thomas Street, Weymouth, was sued by a youth named Dick Short, who sought to recover 25*l.* damages for injuries arising from the defendant's alleged negligence in wrongfully extracting one of the plaintiff's teeth.

Mr. Malim appeared for the plaintiff, and Mr. Huxtable for the defendant.

Mr. Malim said the plaintiff was 13 years of age and resided with his father, who kept the King's Arms Hotel, Weymouth. On January 24 he suffered from toothache, and his sister took him to Mr. Smith's shop. Mr. Smith having examined the boy's mouth in the presence of his sister, took him behind the screen and extracted a tooth, which it was alleged was perfectly sound. Next day the lad's father went to Mr. Smith and told him that he had extracted the wrong tooth. Mr. Smith replied that the tooth he extracted was decayed, but made no expression of regret or offer of compensation. He (Mr. Malim) had since written to the defendant asking him to do something to compensate the lad and bring about an amicable settlement. Mr. Smith, in reply, requested him to correspond with Mr. Huxtable, but he had not done so. He thought there could be no question for the jury except that of damages. The lad had lost a tooth which might have lasted him all his life, the opposite tooth would come down, and he would probably lose that also. He submitted that the defendant had been guilty of gross carelessness.

Evidence was given by the boy, his sister, and his father, and Mr. S. H. Wallis, L.D.S., who subsequently extracted the really decayed tooth, said the tooth drawn by the defendant was healthy and undecayed. The result would be that the tooth above would come down and was more likely to decay.

For the defence, Mr. Smith said he had extracted teeth since 1882. He was not a dentist, and did not give advice on teeth. He thought more of Mr. Wallis than anyone else in the profession. He got any number of boys and girls coming to him to have teeth extracted, and he extracted them for 3*l.* each, and in some cases for nothing. His practice was to tap the tooth and take out the one indicated by the test. The lad's sister did not say that the lad wanted a decayed tooth drawn. The word "decayed" was not mentioned, and he took out the tooth which the lad said was aching. When he saw the father the next day he told him this, and said that it was nonsense to say that he had taken out a sound tooth.

Mr. Smith's assistant gave corroborative evidence.

The Judge said the case for the jury was one of fact and not a matter of law. A man was bound to bring to the practice of his business reasonable care and skill, and if he failed to do so he was liable for the consequence of his acts. In this case, in taking out a sound tooth and omitting to extract the decayed one, defendant had actually to pass his hand over the latter, and he did not know how the jury

would account for that if they thought defendant was reasonably careful. If the sound tooth had been in front instead of behind the decayed one, there would have been more scope for argument on behalf of the defendant. His Honour commented on the advantages of having a good, sound set of teeth, as indicating a sound constitution and being necessary for good digestion, and added that there was no doubt that the wrong tooth was taken out, and that there was a terrible wrench. If the jury found for the plaintiff, he could not lay down any rule of law as to how much they should award, but they must be guided in that matter by their own common sense.

Without leaving the box, the jury found for the plaintiff for 5*l.* damages.

#### CHEMIST AND HIS MANAGER.

AT the Sudbury County Court, on March 13, Jasper James Lakeman, now of Lavenham, sued Herbert George Northwood, who was formerly manager of a business in which he (plaintiff) was interested at Buckhurst Hill. He first engaged defendant in 1889 as assistant at 1*l.* 18*s.* 6*d.* a week, but a new arrangement was made in 1896 under which defendant was to take over the sole responsibility, pay all expenses, and live rent free, paying to Mr. Lakeman 100*l.* a year. There was a balance of 43*l.*, and it was agreed that 23*l.* of this should be spent on repairs to the house, and the 20*l.* was to be put aside to be devoted to the purchase of a half-share in the business by the defendant for 300*l.* The defendant alleged that the 20*l.* was put aside for him absolutely, and, holding that view, he had not paid to plaintiff the last monthly instalment of the 100*l.* a year which he was in the habit of paying. Mr. Lakeman therefore sued Mr. Northwood for 8*l.* 6*s.* 8*d.*, while Mr. Northwood (who is now in business at Gorleston) counter-claimed for 22*l.* 4*s.* 6*d.*, which included a claim for income-tax paid by him.

After hearing evidence and solicitors on both sides, the Judge said he believed the 20*l.* was to be returned to plaintiff if the sale did not come off, and he found for plaintiff on the claim and counterclaim.

#### Bankruptcy Report.

*Re TEMPLAR E. MALINS, Cardiff, Chemist and Cycle-dealer.*

THIS debtor came up for his adjourned public examination, at Cardiff, on March 11. Questioned by the Official Receiver as to a chest which he had forwarded to Birmingham after he filed his petition, he stated that this belonged to his brother, and contained tools which were used by him in the course of his trade as a pianoforte-maker. He denied that they were tools which were used in the cycle-business. Counsel for the trustees having represented himself satisfied with the accounts filed by the debtor, the examination was closed.

#### Gazette.

##### PARTNERSHIP DISSOLVED.

Wiseman, J. G., and Mill, G. S., under the style of Wiseman & Mill, Ossett, surgeons and general medical practitioners.

##### THE BANKRUPTCY ACTS, 1883 AND 1890.

##### RECEIVING ORDERS.

Anderson, James, Tunbridge Wells, doctor of medicine.

Flintoff, James William, Blackburn, drug-store proprietor.

##### ADJUDICATION.

Hames, Harry Munkman, Rushden, chemist and china-dealer.

DUBIGADOUX AND DURIEN have isolated from the juice of the branches of the Algerian Alpine rose a bitter principle which, by chemical and physiological tests, they prove to be strophanthin.

## New Companies & Company News.

**GREENGATE AERATED WATER COMPANY (LIMITED).**—Capital 3,000*l.*, in 5*l.* shares. Objects: To acquire and carry on the business of "The Greengate Aerated Water Company," of Greengate, Keighley, Yorks. The first directors are Thomas S. Cockshott and Edmund H. Cockshott.

**CHERUB SOAP COMPANY (LIMITED).**—Capital 5,000*l.*, in 10*l.* shares. Objects: To manufacture, sell, and deal in soap, candles, glycerin, drysalteries, oil, alkali, and other chemicals, &c. The first directors are James McTurk and Alexander McTurk, of Bradford, and Robert McTurk, of Liverpool. Qualification, 250*l.* Remuneration as the company may decide.

**CARBIDES DEVELOPMENT SYNDICATE (LIMITED).**—Capital 30,000*l.*, in 1*l.* shares. Objects: To adopt an agreement with Richard Warner, and to acquire, own, and work inventions connected with the production of carbides of calcium and magnesium, and with the reduction of metallic oxides and ores. Subscribers include P. E. Harding, chartered accountant, of 102 Cambridge Gardens, North Kensington; J. C. Wolfe, director of a company, 24 Vereker Road, West Kensington, &c.

**A. LUDOVIC (LIMITED).**—Capital 20,000*l.*, in 2,500 preference shares of 5*l.* each and 750 ordinary shares of 10*l.* each. Objects: To acquire the business carried on by Adolphe V. E. de Clercq, at the Margate Soapworks, Margate, as "A. Ludovic," and to carry on the business of soap boilers and manufacturers, chemists, druggists, &c. The first directors are Ferdinand A. L. de Clercq, Samuel E. Burrows, and A. V. E. de Clercq.

**GOLDEN REMEDIES AND GEMS OF HEALTH COMPANY (LIMITED).**—Capital 2,000*l.*, in 1*l.* shares. Objects: To carry on the business of makers and vendors of patent medicines and proprietary articles, grocers, store-keepers, &c. The first subscribers are:—W. Bugg, M.R.C.V.S., and Mrs. C. E. Bugg, Cheshunt; A. J. B. Simpson, Caesahunt, farrier; C. Wackett, coach-trimmer, and Mrs. Wackett, Cheshunt; G. Parnell, engineer, and Mrs. Parnell, Enfield Wash. Miss E. M. Ward is the sole director. Remuneration as the company may decide.

**O. M. MANUFACTURING COMPANY (LIMITED).**—Capital 2,000*l.*, in 1*l.* shares. Objects: To acquire the business carried on in London as the "O. M. Manufacturing Company," and to carry on the business of manufacturers of veterinary specialities and manufacturing chemists. The first subscribers are:—A. H. Rose, Drayton Court, Ealing; R. P. F. Deeley, Teddington; J. H. Smeed, 105 Bouverie Road, N.; J. Harinden, New Southgate; J. W. Thompson, New Southgate; E. B. Adams, 91 Great Tower Street, E.C.; H. E. Norton, Leytonstone, clerk. Registered without articles of association.

**PEARSON ARTIFICIAL TEETH COMPANY (LIMITED).**—Capital 1,000*l.*, in 100*l.* shares. Objects: To adopt an agreement with W. H. Pearson, and to carry on the business of makers and repairers of artificial teeth, and extractors and stoppers of teeth. The first subscribers are:—W. H. Pearson, dentist, D. Pearson, dentist's assistant, and Miss Dora Pearson, 40 George Street, Hull; A. Y. Pearson, agent, and Mrs. Pearson, 67 Waterloo Street, Hull; H. F. Kenningham and Mrs. Kenningham, 56 Brunswick Avenue, Hull. William H. Pearson is the chairman and sole director. Registered office, 40 George Street, Hull.

**"CHAMELEON" PATENTS MANUFACTURING COMPANY (LIMITED).**—Capital 5,000*l.*, in 1*l.* shares. Objects: To acquire from Oswald J. Milne certain inventions connected with the manufacture of fly-catchers, and to carry on the business of fly-catcher manufacturers, collapsible-tube fillers, wholesale druggists, chemists, oil and colour men, drysalters, &c. The first subscribers are:—J. E. Pearce, Crawford, Maidenhead; J. Milne, 102 Oakley Street, Chelsea, S.W.; W. C. Marshall and J. G. P. Ibotson, 14 Sherborne Lane, E.C., chartered accountants; J. J. Fifield, 45 Leadenhall Street, E.C.; F. J. Lawrence, 13 Lillie Road, Fulham, S.W.; H. B. Milne, 19 Versailles Road, Anerley, S.E.

**TOM BROWN & CO. (LIMITED).**—Capital 500*l.*, in 5*l.* shares. Objects: To carry on the business of wholesale and retail chemists, druggists, drysalters, and manufacturers of and dealers in oil cakes, feeding-stuffs, and chemical-manures. The first subscribers are:—Tom Brown, chemist, Mrs. Margaret Brown, and Miss Lizzie Brown, Prospect House, Wolsingham, R.S.O.; Michael Brown, engineer, and Mrs. Mary Brown, 49 Coatsworth Road, Gateshead; Thomas Pybourne, Angate Street, Wolsingham, R.S.O., blacksmith; Alfred Strong, Woodbine Cottage, Wolsingham, R.S.O., chemist. Registered without articles of association. Registered office, Argate Street, Wolsingham, R.S.O.

**THE CHEMISCHE FABRIK HEILENBERG (formerly E. Dietrich) has paid an interim dividend of 8 per cent.**

**SCHWEPPES (LIMITED).**—Earl de la Warr has resigned his directorship of this company, and Mr. C. D. Kemp-Welch has accepted the chairmanship.

**PARKE'S DRUG-STORES (LIMITED)** announce the payment of an interim dividend on the ordinary shares for the half-year ending December 31 last, at the rate of 6 per cent. per annum, free of income-tax, payable on March 30.

**SPRATT'S PATENT (LIMITED).**—The annual meeting of shareholders was held at the Cannon Street Hotel on March 14, Mr. G. Beetham Batchelor in the chair. The Chairman moved the adoption of the report, particulars of which were given in our last week's issue, and observed that the company had had a very busy and satisfactory year. The disturbance in the wheat-market in the early part of 1898 had given the directors some anxiety, but their large forward contracts happily tided them over the period during which flour was to a very considerable extent tied up. The motion of the Chairman was seconded by Mr. Robert Baelz, and unanimously agreed to.

**PRICE'S PATENT CANDLE COMPANY (LIMITED).**—At the annual meeting of this Company it was stated that the profit for the past year was 83,500*l.*, 6,000*l.* more than in the preceding year. The increased profit was attributed partly to the exceptionally low prices of raw materials prevailing throughout 1898, and partly to the economies resulting from the improvements in plant and processes that had been continuously effected during past years. The amount available for distribution was 61,448*l.* Of this 12,500*l.* would be written off for depreciation of fixed properties and plant, 32,812*l.* 10s. applied in paying a dividend of 1*l.* 6*d.* per share, making with the September dividend 1*l.* 12*s.* 6*d.* per share, and 10,000*l.* would be added to the reserve fund, raising it to 50,000*l.* The remaining 6,136*l.* would be carried forward.

**LEWIS & BURROWS' DRUG-STORES (LIMITED).**—The directors' report for the past half-year states that they have acquired a shop, for which they were in treaty at the time of the previous meeting, and that this and the additional shops referred to in their last report have been opened with most satisfactory results; but, in accordance with their policy set forth at that meeting, no further shops have been acquired. They have devoted their energies to the development of the business of their present shops, and the present weekly sales show a very considerable increase. Their decision to carry on their Piccadilly business in less costly premises has been justified by the results. They recommend the payment of the 6-per-cent. dividend on the preference shares, and of a dividend at the rate of 3 per cent. on the ordinary shares (other than the vendors'). They propose in future to make their financial year terminate on September 30, and they will also submit to the general meeting a resolution to alter the name of the company to Lewis & Burrows (Limited).

**THE BORAX COMPANY (LIMITED).**—In the Chancery Division on Saturday before Mr. Justice North, Mr. Vernon Smith, Q.C., moved in the action of Foster v. The Borax Company (Limited) for an injunction to restrain the company from parting with any of the assets of the company, and for the appointment of a receiver and manager. Counsel stated that the Borax Company was formed in November, 1887, with a capital of 1,000,000*l.* (in 10*l.* shares), which was afterwards reduced to 250,000*l.* The company also issued debentures to the extent of 295,200*l.*, carrying

interest at 6 per cent. On June 22, 1898, there was a resolution to voluntarily wind up, in order to carry into effect an arrangement with the debenture-holders, and in July of the same year an order was made sanctioning the scheme under which the present debentures stood. On November 28 an agreement was entered into between the company and a Mr. Defries for the sale of the company to Borax Consolidated (Limited). The purchase was to be made as and from October 1, 1898, the consideration being £320,000, payable in cash, debentures, preference and ordinary shares in certain proportions. The plaintiff, as the holder of a considerable number of debentures, submitted that if this arrangement was carried out the company would cease to carry on business, and that therefore the security had become enforceable. He contended that the arrangement was illegal, and would be prejudicial to his interests as a debenture-holder. He understood it was suggested on the other side that the proposed arrangement was well within the terms of the memorandum of association, and was therefore binding on the plaintiff as a debenture-holder. This was not an amalgamation, but an out-and-out sale. But, if carried out, all the plaintiff would be entitled to would be a charge on the debentures, and shares taken in exchange, for the purchasing company were not bound to pay a farthing in cash. The fact that a large number of debenture-holders in the company did not approve of the plaintiff's action did not alter the plaintiff's right. The further hearing was adjourned until Friday next.

## Westminster Wisdom.

### THE SALE OF FOOD AND DRUGS BILL.

The Government Bill to amend the Sale of Food and Drugs Act was read a second time on Thursday, March 9, by a majority of 194, only eighteen members opposing it. Mr. Kearley, who has a Bill of his own, complained that the Government had only adopted ten out of twenty three recommendations which had been made by the Select Committee, and he especially complained of the omission of the proposal to set up a Board of Reference to deal with technical and scientific questions. He and other members intimated their intention to add to the Bill in committee. Mr. T. W. Russell, the Parliamentary Secretary of the Local Government Board, commented on the proposal to render it illegal to add preservatives to milk, butter, &c. He said the Select Committee arrived at no decision. He himself did not believe preservatives did harm; they were useful in legitimate trade, and the Government saw no reason for prohibiting their use. Count Moore, the new member for Londonderry, claimed to have been the originator of all the legislation which had taken place "on this question." He said he introduced the first resolution which dealt with it eighteen years ago. Perhaps he referred only to margarine; if he meant adulteration generally he was clearly mistaken, as the first Act was dated 1875.

### CARBOLIC ACID—ANOTHER PRIVY COUNCIL BILL.

In the House of Commons, on Monday, March 13, Dr. Farquharson asked the Secretary of State for the Home Department whether, considering the frequency of accidental poisoning by carbolic acid, the Government would now consent to the addition of this substance to the schedule of poisons within the meaning of the Pharmacy Act, 1868, thus making it subject to the poison regulations recently adopted by the Pharmaceutical Society of Great Britain, in accordance with Act, which require that all lotions containing poison should be sent out in bottles readily distinguishable by touch from ordinary medicine bottles?

Mr. Collings: The Secretary of State understands that the Privy Council, while not thinking it expedient to include carbolic acid in the schedule of the Pharmacy Act, are of opinion that regulations should be made with regard to its sale, and have prepared a Bill for the purpose. It is, however, impossible to say whether the state of public business will permit of the Bill being introduced this Session.

### THE FLASH-POINT.

The House of Commons on Wednesday rejected Mr. Reckitt's Bill to raise the flash-point of "petroleum within

the meaning of the Act" from 73° to 100° F. by 244 votes to 159. Mr. Jesse Collings, on behalf of the Home Office, was the most important opponent of the Bill; and much of the discussion turned on the memorandum attached to Mr. Reckitt's Bill, declaring that it only carried out the original intention of the Government. The real objection of the "trade" to this alteration is that, if passed, it would throw so much more petroleum-spirit on the market that the price of that article will fall by a farthing or a halfpenny a gallon. It is highly probable that the price of the oil would not be affected. If this is a correct assumption, and there is good ground for it, it will be seen that Parliament has sacrificed the safety of the consumer to the pecuniary interests of the Standard Oil Company.

## Deaths.

ANDREW.—On March 12, at 168 Union Street, Aberdeen, Mr. Wm. Andrew, pharmaceutical chemist. Aged 83.

DUNCANSON.—At Stirling, on March 10, William, youngest son of the late William Duncanson, chemist, Stirling.

HARVEY.—On March 7, Louisa, wife of Mr. W. S. Harvey, the Central Pharmacy, Margate. Aged 45.

JEFFREY.—On March 11, at 2 Imperial Road, Redland, Bristol, Mr. H. Jeffrey, chemist and druggist. Mr. Jeffrey, was in business for twenty-five years in Stokes Croft, and retired some ten years ago.

MADDISON.—On February 28, Mr. T. H. Maddison, Fulham, chemist and druggist. Aged 43.

MILLER.—Prof. Dr. Wilhelm von Miller, head of the chemical laboratory of the Technical High School at Munich, died on March 1. Aged 50. At various times Dr. von Miller worked on pharmaceutical subjects. Thus, in 1874, he published a research on storax, which was followed by a number of papers on the same subject. Next to this his most ambitious research was a study of the chinoline bases, which led up to some quite new views on the constitution of quinine.

PILLEY.—At Boston, on March 7, Mr. Samuel Pilley chemist and druggist. Aged 81. Deceased gentleman was born at Kexby, near Gainsborough. He was a member of the Boston Town Council for three years, and was also a magistrate of the borough. He retired from public life some years ago, and recently ceased to take an active part in the business of Pilley & Son, chemists, of which he was for many years head.

Tomlinson.—On March 5, Mr. J. C. Tomlinson, chemist and druggist, Lytham. Aged 59.

WALKER.—At Willenhall, on March 10, Mr. Edward Walker, chemist and druggist. Aged 64. Deceased was a member of one of the oldest Willenhall families, and at one time took a considerable interest in public affairs. He occupied a seat on the old Local Board of Health, and was also at one time one of the representatives of Willenhall on the Wolverhampton Board of Guardians. During recent years, however, Mr. Walker took little interest in public affairs. He leaves a widow, one son, and six daughters.

QUICKSILVER.—Californian quicksilver, to the amount of 15,935 bottles, was produced during the first eight months of 1898, against 10,760 bottles in 1897. Of the quicksilver produced in 1898, 4,257 bottles were exported, at a value of \$154,986.

"I wanted to give 'Pharmaceutical Formulas' a practical test, which required time. I have referred to it in the ordinary course of business many times, and it has not failed me yet. The index is good, and the information, so far as I have tested it, thoroughly reliable. I can already trace the profits of a hint derived from my first perusal of the book to over 30s, and the line bids fair, in a few years, to develop into an excellent proprietary."—MR. GEORGE W. WILTON, President Central Pharmaceutical Association, Wellington, N.Z.

## Business Changes.

MESSRS. JENKIN & PHILLIPS, drug-brokers, have removed from No. 21 to No. 14 Mincing Lane, E.C.

MR. A. W. SHIRRAS, chemist and druggist, has started in business at 35 Powis Terrace, Kittybrewster, Aberdeen.

MR. JOHN PEEBLES, chemist, Kirkcaldy, has opened a branch pharmacy at 1 Balsusney Road, a growing suburb of the Lang Toon.

THE premises of Mr. C. J. Arblaster, chemist, 13 Hagley Road, Five Ways, Birmingham, are about to be demolished, and the stock and fixtures will be sold by auction.

MR. J. PILKINGTON has opened a pharmacy at 137 Marsland Road, Brooklands, Sale, near Manchester. Messrs. Ayrton & Saunders, of Liverpool, supplied the fittings.

MESSRS. BRION, PATÉ, BURKE & Co., proprietors of Berandine (peat-wool) specialities, have removed from 15 Walbrook to 6 Wool Exchange, Basinghall Street, E.C.

A NEW PHARMACY has been opened at 18 Duke Street, Chelmsford, by the Essex County Drug Company under the management of Mr. J. Ord Smith, pharmaceutical chemist.

MR. C. BREESE, chemist and druggist, 109 Mitcham Road Streatham, has considerably enlarged his shop, and it has been entirely refitted in first-class style by Treble & Son, of Holloway.

## Personalities.

MR. GWILYMP EVANS, J.P., of Llanelly, has been appointed High Sheriff for the county of Carmarthen.

SIR WM. CROOKES, F.R.S., and the Astronomer Royal have just become liverymen of the Spectacle-makers' Company.

MR. E. J. BISHOP, chemist and druggist, Folkestone, has been installed Junior Warden of the Temple Lodge of Freemasons.

MR. F. C. J. BIRD, chemist to Messrs. C. R. Harker, Stagg & Morgan, has been elected a member of the Society of Public Analysts.

MR. W. J. SEWELL, chemist and druggist, Goole, has been appointed a Vice-President of the newly-formed Goole Liberal Association.

COLONEL T. DAVIES SEWELL, clerk of the Spectacle-makers' Company, has been elected a Fellow of the Royal Astronomical Society.

MR. PHILIP D. ARMOUR, Chicago, has presented to the Technical Institute, founded by him in that city, a further donation of \$750,000.

MR. R. A. ROBINSON, L.C.C., chemist and druggist, of 95 Brompton Road, S.W., has been elected a Vice-President of the Kensington Ratepayers' Association, of which Lord Chelmsford is the Chairman.

MR. SIDNEY HARVEY, who some time ago relinquished his pharmacy in High Street, Canterbury, on being appointed the city analyst, has now been given the position of public water analyst, vice the Clinical Research Association.

DR. S. MONCKTON COPEMAN has been awarded the Fothergillian gold medal, on the recommendation of the Medical Society of London, in recognition of his researches on the preservative effects of glycerin upon vaccine-lymph.

MR. GEO. BREEZE, Secretary of the Plymouth, Devonport, Stonehouse, and District Chemists' Association, asks us to intimate that all communications respecting the Association should be addressed to him at 42 Station Road, Union Street, Plymouth.

MR. ROBERT W. BOWERS (Bowers Brothers, Blackfriars) was last week honoured by his Masonic friends in the parish of Christchurch, Southwark, who, through Mr. Causton, M.P., presented him with an illuminated address and a fine gold

watch in appreciation of his literary and other services to the parish.

ON Friday last, March 10, the members of the Sheffield Pharmaceutical and Chemical Society presented to Mr. W. Ward, F.C.S., a handsome portrait, which had been subscribed for by the members and student-associates of the Society, in recognition of his long and valuable services as honorary local secretary of the Pharmaceutical Society of Great Britain. The portrait bore the inscription, "Presented to Mr. W. Ward, F.C.S., in recognition of twenty-one years' services as honorary secretary of the Pharmaceutical Society of Great Britain." Mr. G. T. W. Newsholme, Vice-President of the Society, made the presentation after a highly complimentary little speech, and Mr. Ward, in thanking the members for the handsome gift, said that he felt this to be one of the proudest moments of his life. He did not know that he had done anything to merit the beautiful gift. He had taken the post of local secretary, and always thought it his duty to perform all the obligations connected with it to the best of his ability. He had striven to gain members and associates throughout the district, and he was not boasting when he said that Sheffield had for many years ranked very high indeed in its membership. He had also taken a deep interest in the welfare of the Benevolent Fund, and Sheffield had done its duty in supporting that noble institution.

## Wills of Deceased Chemists.

BURGESS.—The will of Mr. J. S. Burgess, chemist and druggist, Regent Road, Salford, who died on September 9, 1898, has been proved by Mrs. Elizabeth Burgess, widow and sole executrix of the testator, whose estate is sworn at 1,136*l.* 8*s.* 3*d.*, of which 681*l.* 14*s.* 10*d.* is net personality.

HORSLEY.—The will of Mr. T. W. Horsley, chemist and druggist, 274 Portobello Road, Notting Hill, who died on November 6, 1898, has been proved by Mrs. Horsley, the widow, and Mr. W. R. Taylor, 44 Nicholas Street, E. The testator's estate was sworn at 4,855*l.* 9*s.* 8*d.*, of which 4,059*l.* 11*s.* 6*d.* is net personality.

SIMPSON.—The will of Mr. J. W. G. Simpson, chemist and druggist, 92 High Street, Maidstone, and Malling Place, West Malling, who died on June 4, 1898, has been proved by Mrs. Fanny Simpson, widow and sole executrix of the testator, whose estate is sworn at 3,830*l.* 12*s.* 3*d.*, of which 2,897*l.* 10*s.* 9*d.* is net personality.

TUCKER.—The late Mr. Henry Seymour Tucker, chemist and druggist, 139 Great Hampton Row, Birmingham, having died on August 5, 1898, intestate and a widower, letters of administration to his estate have been granted to his son, Mr. Henry William Tucker. The gross value of the estate is sworn at 609*l.* 16*s.*, and the net personality at 532*l.* 12*s.* 9*d.*

TURNER.—The late Mr. John Turner, chemist and druggist, Hexham, having died intestate, letters of administration to his estate have been granted to his father, Mr. Thos. J. Turner, as next-of-kin. The deceased's personality was sworn at 1,653*l.* 10*s.* 1*d.* gross, and 1,056*l.* 1*s.* 1*d.* net.

VARNEY.—Letters of administration to the estate of Mr. H. G. Varney, chemist and druggist, 71 High Street, Oxford, who died on May 30, 1898, intestate, have been granted to his widow, Mrs. Maria Varney. The deceased's estate was sworn at 2,397*l.* 10*s.* 8*d.*, of which 1,112*l.* 7*s.* 10*d.* is net personality.

VENMAN.—The will of Mr. Hezekiah Venman, chemist and druggist, 20 Pimlico Road, and 138 Dawes Road, S.W., who died on January 16, has been proved by Mrs. C. E. Venman, widow and executrix of the testator, whose estate was sworn at 485*l.* 11*s.*

VIGGARS.—Letters of administration to the estate of Mr. Geo. D. Viggars, chemist and druggist, 68 High Street, Tunstall, Staffordshire, who died intestate on October 5, 1898, have been granted in London to Mr. Jabez Viggars, brother and next-of-kin of the deceased, whose estate is sworn at 1,633*l.* 17*s.* 4*d.*, of which 567*l.* 1*s.* 8*d.* is net personality.

## The Poisons Regulations.

### Difficulties and Suggestions.

We can only find space in this issue for a portion of the remaining suggestions which have been sent in to us as a result of our offer of five guineas in prizes, but we hope to be able to print the rest next week and to make the awards then.

THE Daily News of Saturday last had something to say about this competition, arising from a suggestion following upon the death of Dr. A. K. H. Boyd that the Pharmaceutical Society should offer a prize for a poison-bottle. Our contemporary's remarks are as follows:—

THE CHEMIST AND DRUGGIST has offered a five-guinea prize for a good tell-tale poison-bottle, and has received many valuable suggestions in reply. One of them is that the neck should be at right-angles to the body of the bottle, instead of in a line with it. This idea also reaches us from another quarter. Another, of a more fanciful kind, is that the user should be warned off by a death's head and cross-bones on the poison-label. But the main thing is the appeal to other senses than that of sight. The bottle must be able to signal "poison" in the darkness. One ingenious person, as we showed the other day, proposed to appeal to the sense of hearing by means of a sort of musical cork. The senses of taste and smell, of course, are out of the question. The sense of touch remains, and this or nothing can be our safeguard. This sense may be stimulated by differences of form in the bottle or by differences of texture. One competitor for the prize suggests strips of sandpaper pasted on the sides. But while he is about it, why not have the roughness in the texture of the bottle itself, and combine the two safeguards in a triangular bottle with "toothed" edges? If anything further is wanted, put the neck at right-angles, as aforesaid. Any person who persisted in the abuse of the bottle in spite of these precautions ought to be brought under the Habitual Inebriates Act.

There is a technical side to the new regulations affecting the storage of poisons which exclusively affects the dealer. He is himself required to store these preparations in special bottles. Some of the correspondents of THE CHEMIST AND DRUGGIST think that the bottles may be sufficiently specialised by the sandpaper label. Others object to the whole thing as a fad, and as a harassed interest cry out to be left alone.

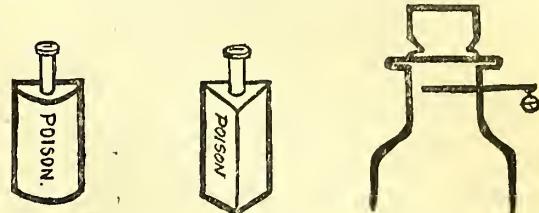
The Daily Graphic has been very successful in getting ideas, new and old, for poison-bottles. Amongst our contemporary's correspondents is the Countess of Suffolk, who has a bottle which, if universally adopted, "would absolutely preclude the possibility of any mistake being made such as caused Dr. Boyd's death. The bottle is one of the usual ribbed kind. On the top of the cork is fixed a thin piece of wood  $1\frac{1}{4}$  inch square, in the centre of which is a small bell, the whole being attached to the bottle by a piece of string. This device, therefore, gives a double warning—to one's senses of feeling and hearing." Miss Kenealy mentions a similar bottle used in the United States, the bell of which acts through a spring, and goes on ringing for some time after the bottle has been uncorked. The Editor remarks that "in a large percentage of accidental poisoning-cases the bottle whence the deadly dose was taken has been shown to be the orthodox blue ribbed bottle. A study of the details of accidental poison-cases makes it evident that the difference between the poison-bottle and the medicine-bottle needs to be strikingly obvious. Illness dulls the senses to more or less degree. The eyes do not clearly diagnose the difference between the colours of bottles. The sense of touch is not so keen to note the ribs and angles of a bottle. The use of a bell-cork may solve the problem. But the moral needs to be brought home with insistence that no sick or semi-sick persons should be allowed to pour and mix their own medicines. When the bodily powers are weakened the mental faculties lose their clearness; and no invalid should have the 'run' of a collection of medicine, lotion, and liniment bottles."

These are very wise remarks, but not even an Act of Parliament could enforce such strictures. The drug-trade takes every precaution, and since the Pharmacy Act has brought into the trade a greater number of educated and responsible retailers, accidental fatalities from the use of poisons have been reduced year by year. The efforts of chemists and druggists will not be relaxed, but the very fact

that such intellectual giants as Professor Tyndall and Dr. Boyd, during mental lapses, got behind the chemist's precautions is evidence that there is a limit to pharmaceutical power.

### ALARM AND BOTTLES.

Contrivance consists of a spring clip with a bell attached to the loop at end of clip. The clip is pushed up to the top of the neck, so that the bell swings easily without touching



the bottle. When the stopper is removed the vibration is enough to cause the bell to ring. The contrivance is very simple and can be made to suit any size bottle, and can be taken off and readjusted in an instant, so that it will not interfere with cleaning. I also submit two samples of poison-bottles made of the usual colour.

Pentre, Rhondda Valley.

W. J. DAVIES.

### SAND AND VARNISH.

I suggest that for distinguishing bottles, pots, packages, &c., containing scheduled poisons in a simple manner, a little spirit-varnish be mixed with some rough substance, such as sand, poppy-seeds, or fine sawdust, and that with a camel's-hair brush a streak of this be painted on the bottle or box, or, in case of a parcel, along the label. This alike attracts the sense of sight and touch. Every pharmacy has these things at hand.

Hastings.

T. D. VINT.

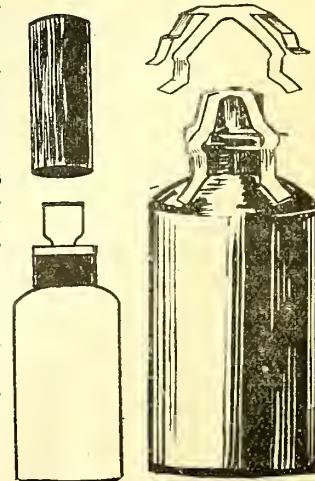
For chemists who, like myself, have not too much money to play with, there is a cheap and easy method of making the shop-bottles "distinctive to touch" while showing contents. Varnish with copal or other clear varnish, and sprinkle with silver sand. The bottles look well, feel rough, meet the law, and a lot can be done for 2d.

Southend.

J. H. HEYWOOD.

### DISPENSING AND STOCK BOTTLES.

An anonymous correspondent sends two ideas. The first is a 2-oz. stoppered bottle with a metal collar upon which a metal top is fixed by pushing down (see illustration). We presume that this is for dispensing-bottles, or for dispensing some poisonous preparation, such as lin. aconiti. If the latter, which the sender is not clear about, we may point out that the cap does not make the bottle distinguishable to touch, as the regulations require, but the notion may be adapted to a touch-distinguishable bottle, and is suitable for bottles for the dispensing-counter. The second notion is a simple arrangement for capping storage-bottles. It is a piece of tinplate cut in the shape of a Maltese cross (5 inches from tip to tip of each bar), and this is bent, as shown in the illustration, to clip upon the neck of the bottle.



## The Future of Monopoly.

[Under the title of "Competition and Monopoly" we commented last week on Mr. H. W. Macrosty's interesting article on "The Growth of Monopoly in British Industry" in the March number of the *Contemporary Review*. In our notes on Mr. Macrosty's somewhat sad anticipations of the future of British commerce we were obliged to read into them the socialistic views which we had reason to believe he held; but meeting him a few days later we asked him to explain himself, and, if possible, to justify his revolutionary contentions for the benefit of our section of the world of industry. We append the result.—ED. C. & D.]

A FEW years ago it was still permissible to regard with amused scepticism the prophecies of those economists who foretold that British industry would follow in the line of development marked out by America, and that the private trader must give way to monopolist companies. To-day even a casual acquaintance with the daily press is enough to destroy the old complacency. In the current number of the *Contemporary Review* the present writer has tried to give an outline of this new phase of industry, and since that article was written there can be added, as combinations either completed or approaching completion, the British rubber-manufacturers, the Lancashire cotton-bleachers, the Calico-printers' Association, the Velvet-dyers' Combination, and associations of the manufacturers of iron and steel boiler-tubes and steel boiler-plates, to say nothing of such minor amalgamations as Messrs. Bentley and Messrs. Macmillan's the publishers, or "Sunlight" and "Monkey Brand" soaps. The movement in America proceeds with gigantic strides; at the end of last year the capital of the trusts was estimated at 541,000,000 $\text{£}$ ; it is now nearly half as much again. Everything points to the speedy verification of the statement made by Dr. Bonar, the President of the Economic Section of the British Association at Bristol last year, that in a few years the industrial world would be governed by comparatively few large companies. Such a tremendous change affecting all social relations evidently demands the attention of everyone and the question, if not of the moment, at least of a day not far distant, will be, What is to be done with our national industries?

The first idea to be thoroughly grasped is that this development is not artificial, but natural and inevitable. The large manufacturer killed the small man by means of his greater efficiency in production; the limited-liability company came into existence to meet the demand for larger capital to work improved machinery which was beyond the resources of petty businesses; and the trust or combination is devised to stop ruinous competition and loss of profits. So long as people believe in their present political philosophy they have no right to grumble at these changes. Society exists for the mutual satisfaction of the wants of its members, and it has elected to rely on the desire of individuals for private gain as the mainspring of action. Granting this philosophy and given the scientific changes in manufacture of the past century, the present outcome was unavoidable. So long as competition pays traders will compete; when it ceases to be profitable they will combine first to keep up prices, then to raise their profits, and, finally, to pool all their interests. But, it will be asked, shall we be any worse off then than now? for to-day neither the manufacturer nor his workmen can claim to have the interests of the consumers at heart. The answer is that, to-day, a trader may desire to fleece his customers but is prevented by the competition of his fellows, but when he and his rivals combine they will have both the desire and the power. Prices in the velvet-dyeing trade rose 75 to 100 per cent. after the union was formed; since the

agreement in the bedstead-trade was made prices have gone up 10 to 70 per cent. At the recent Board of Trade inquiry it was stated that the Dunlop Company charged 69s. 9d. in England for a tyre which they sold in Holland for 47s. If the perambulator trust, which is being negotiated in Birmingham just now, is completed, the fact will soon be brought very close home to our young married people. Little is to be hoped from fresh competitors springing up and cutting down prices. When the combination takes the form of an "alliance" between employers and employees, as at Birmingham, and the men contract to work only for masters who charge the agreed profit, then an intending competitor is headed off at the very beginning, for he cannot get workers. In the retail trade we are familiar with the fate of a new baker who refuses to charge trade prices: he perishes of underselling. It is here that in the chemist's profession the P.A.T.A. forms a curious subject of study to the economist. For in so far as it is effective a new chemist must either find a new field or charge the fixed prices, otherwise he is refused supplies. As regards the articles concerned, the members of the Association act like one firm, and we have the limitation of competition virtually taking the form of a partial trade fusion. Nor can foreign competition be invoked for the safeguarding of the consumer. Protection is a great assistance to trusts, especially when, as in America, they have a great political party in their pocket, but free trade will not save a country from their operations. Capital—especially joint-stock capital—is not national, but international. To-day a great "combine" of the American coal-railways, involving 180,000,000 $\text{£}$ , is announced, which will eliminate all competition in coal, and the scheme depended on the consent, now said to be secured, of the English shareholders. Little they will care about their American customers while dividends are high. The Standard Oil Company is not only supreme in the United States, but it has absorbed Canada, and controls prices in Britain. The sewing-thread industry is entirely in the hands of three huge connected companies—Coats & Co., the English Sewing-cotton Company, and the American Thread Company. And at the present moment negotiations are going on between an American syndicate and the English makers of oil and seed cake to form a trust involving 15,000,000 $\text{£}$  to fix prices and to eliminate competition.

Seeing that the principle of competition has thus worked out its own destruction, and that there is no help from any private source, the course of the collectivist is clear. He will appeal to the co-operative spirit, and call on the State first to control and finally to administer industries when they become monopolist. This seems revolutionary, but it has only taken us about a hundred and fifty years to make the much greater progress from the cottage industry to the trust. No date can be fixed for the advent of the new régime, for socialism is not a plan to be realised on some date which a prophet might foretell, but a principle to guide the State in its relations to industry and to be applied gradually as circumstances demand. The so-called "natural" monopolies of gas, water, electricity, &c., must be taken over first. Next in order come railways—the arteries of trade—which, though supposedly competitive, in reality work under mutual agreements. No question touches every business-man so closely as that of the nationalisation of the railways. The proposed amalgamation of the South-Eastern and London, Chatham and Dover Companies—which could be equally well achieved by a private agreement—has shown everyone what evils lurk in private monopoly, and a similar commercial disaster is pending in Ireland. It is almost

impossible to estimate the injury inflicted on British commerce by the present system of traffic-management. One fact alone must suffice—the rate of carriage of heavy goods is in Great Britain  $\frac{3}{4}d.$  per ton per mile; in Germany,  $\frac{1}{2}d.$ ; and in the United States,  $\frac{1}{4}d.$  The most pressing need of the trader is that the railways should be taken over by the State and worked for the benefit of our national industries. Many Blue-books have shown the injury inflicted on our commerce by the agreements in the shipping-trade, and the Government ought at least to use the influence which the mail-contracts give them to insist on fair treatment of British shippers. Of equal importance with the transit systems comes coal, the raw material of industrial power, and Sir George Eliot showed, as long ago as 1893, how the mines could be managed by a central board. The Welsh coal-strike cost the Government alone 200,000*l.* last year in enhanced prices, which would have been saved if we had State mines. Whatever may happen to other industries, that industry upon which all others depend should not be left to the vagaries of private individuals.

So far it has been comparatively plain sailing, but a great deal must happen before the average man is convinced of the dangers of private monopoly and the advantage of national ownership of our great industries. The process of amalgamation must spread much farther, for the State will only take over industries in proportion to their degree of concentration and their possible danger to the community. But by improving education and fostering invention, the State can improve the efficiency of industry so as to facilitate national management when it does come about. Nor is "socialism" possible to any extent so long as the commercial atmosphere remains in its present mephitic condition. The Lord Chief Justice, Sir E. Fry, and the London Chamber of Commerce—with the valuable co-operation of Mr. Hooley—give us powerful reasons for fearing that if the great industrial companies are to grow up amidst swindling and corruption, masquerading as "commercial ethics," we shall have the same result which has happened in America—the utter demoralisation of business and public life, leading not to socialism but straight to anarchy of the most dangerous sort. The Government is the highest organ of public life; through it the national will and conscience are translated into action, and it is the duty of our administrators to gather up those higher emotions and influences which move men, and, strengthening them by concentration, use them for the purification of commercial life. Good institutions, including good laws, react upon morals, and as the public conscience becomes more sensitive, it will become more intolerant of company rule and more awake to the advantages of national administration. Much water will pass over the mill-wheel before we complete the collectivisation of industry, but sufficient for the day is the moralisation of trade.

HENRY W. MACROSTY, B.A.

"'PHARMACEUTICAL FORMULAS' is the best thing of the kind I ever saw. It is just what I've always wanted."—W. J. FRISBEE (Bashnell, Ill., U.S.A.).

BISMARCK, THE CHEMIST.—"Do you know who Bismarck was, my son?" asked the father. "Less see," mused the boy. "Wasn't he the fellow who made 'blood 'nd iron' bitters?"—*Drug Topics*.

PROLENE, says the *Financial News*, is a product likely to be much heard of in the future. It is a pure protein extracted from milk by a newly-discovered process. It can be made up into flour, bread, cakes, jellies, custards, biscuits, &c., which are as pleasant to the palate as their prototypes, and at the same time are claimed to be much superior in nutritive qualities.

## Correspondence,

*In writing letters for publication correspondents should adopt a concise, but not abbreviated, style. They are requested to write on one side of the paper only. Letters,*

**Notice to Correspondents.** *with or without a nom-de-plume, must be authenticated by the name and address of the writer.*

*Queries should be written on separate pieces of paper, and the regulations printed under the sections to which they apply should be strictly observed.*

### Boric Acid in Milk.

SIR.—I hoped to have had an opportunity, at the adjourned hearing of the case against the Belgravia Dairy Company (Limited), before Sir James Vaughan, of explaining a statement that first appeared in the daily papers that the presence of boric acid made no difference up to 5 per cent. When Sir James came into court he immediately summed up the case, and announced his decision. To prevent any misconception, I have written to the paper that I believe has the widest circulation amongst those specially interested, and, as the matter is of considerable importance, will you allow me to state that the sentence reported in your columns, "it made no difference up to 5 per cent.," was spoken in relation to actual experiments performed with varying proportions of borax and boric acid on the three recognised digestive processes? These experiments showed that but little material difference was observable in the amount of food digested until 5 per cent. of borax or boric acid was present. Is it not, therefore, unfair to harass a trade with criminal prosecutions for putting into milk, when the need arises, less than  $\frac{1}{10}$  per cent. of boric acid? In the case before us it was 0.02 per cent. Let us by all means have a legal limit fixed, but save us from the excessive and misguided zeal of some public analysts who almost make one believe they enjoy obtaining convictions.

Yours truly,

A. J. DE HAILES, F.I.C.

15 Red Lion Square, W.C., March 10.

### Poison Regulations.

SIR.—At first sight the new poison regulations appear to have been framed with a view to show the world how every care is taken to prevent accidents in dispensing, and the daily papers, as well as the pharmaceutical press, have sounded their praises. On closer inquiry, however, one finds that the regulations are of little or no value. I say nothing from the view of the retail chemist, but as a public dispenser the whole thing seems a gigantic farce. I am informed by the authorities that the "regulations do not apply to dispensaries." This shows their uselessness. Precautions have always been taken in high-class pharmacies about dispensing, but there are at least 4,000,000 prescriptions a year (a low estimate) in the county of London that do not come under the regulations. Add to that the number dispensed by medical men and what can be the number of prescriptions that the regulations do not affect?

Might I add one thought on the draft Pharmacy Bill? Does it not strike one as curious that the Society can gravely formulate such a comprehensive Bill with hopes of success, and yet have been unable to get the Local Government Board to raise the qualification of the Poor-law dispenser—a case in which they have no rich outside interests to contend with?

Yours to command,

G. F. FORSTER, M.P.S.

SIR.—I am of opinion that the majority of your correspondents err upon the side of making a glaring distinction between "poisons" and ordinary stock. What is wanted is something that will be striking enough to the dispenser, and yet not enough to raise the susceptibilities of old ladies, who regard every young chemist as a would-be poisoner if he gets the chance.

For this purpose I propose to use white flint-glass corrugated bottles for poisons in everyday use—tr. opii, acid. oxalic., &c.—and with a label, not a glaring red, but, say, black upon gold, as a change from the usual black upon

white generally in vogue. The stoppers also to be different—a globe-shaped instead of mushroom—some variation upon the run of the shop. The stopper would itself be “evident to touch.” These bottles, as usual in every well-conducted pharmacy, would be scattered over the shelves throughout the shop, and not all together as some propose. For the more deadly poisons—strychnine, atropine, &c.—I am making a cupboard, with lock and key, to stand in the middle of the dispensing-counter, to be fitted with glass doors, and the key to be kept hanging on a nail at the desk, unless when wanted.

The bottles in this cupboard not to be uniform, but every cross-grained odd bottle possible to be in use, the main point being the entire absence of two bottles of the same style. Some would be stoppered, some fluted, others capped—all colours, shapes, and sizes. “Price’s glycerine,” “Churchill’s hypophosphites” bottles, square-stoppered, round-stoppered, ball, and squat—the variety is endless. This, I think, would meet the requirements to the full, and give satisfaction to the chemist himself.

Yours very truly,

Glasgow, March 11.

A. MCKELLAR.

SIR,—As all medicine-bottles are made to stand upright, why cannot those for holding poison, &c., be made to lie down? An angular form, it appears to me, would be most suitable as being most distinguishable. But when you have invented, as you may think, some preventive plan, I want to know whether the medical men will adopt it, as the majority of accidents happening from mistaken bottles is where they have been sent from the surgery of some M.D.

Yours respectfully,  
CHEMICUS. (211/34.)

[It is impossible without a new Act of Parliament to make the poisons regulations applicable to registered medical practitioners, veterinary surgeons, and wholesale druggists; but what chemists need to do is to get the public to understand that safe dispensing is to be assured only by going to them.—ED. C. & D.]

SIR,—Mr. E. Wilson appears to have mixed up the question of the sale of poisons for internal and external uses. He will find I was referring to the latter only, and I still prefer to change a customer’s bottle for a fluted poison one, if agreeable to customer, and if it can be done without actual pecuniary loss; otherwise the use of sandpaper or thick crocodile-paper (which I believe our printers will soon have ready) answers to distinguish it from a preparation for internal use. On the strip an imprint from a rubber stamp, “Please *do not remove this strip*,” and on the label a warning why these precautionary measures are taken, will meet the requirements of the Act better than anything I know. Whether we like it or not, a mere label on a customer’s bottle for such preparations is ignoring an Act which we at a special meeting agreed to carry out. Many customers have already expressed their satisfaction at the efforts chemists are making to reduce accidental poisoning, but one must expect to irritate a few who always conclude the chemist is trying to “have them” whenever he departs from ancient customs. Cases will also crop up where castor oil, carbolic acid, syrup of rhubarb, and spirit of salts will be indiscriminately sold at oilshops and by hucksters with our caution-labels still adhering to the bottles. But when accidents result they will emphasise the safety of dealing with the trained chemist.

As to “storing and dispensing of poisons,” I am sure it is safer to keep those in continual use, as tr. opii, tr. camph. co., syr. papaver., and stock proprietaries, in bottles of distinctive size and shape, and on our shop-shelves, not necessarily among the simpler preparations. Cupboards for Parts 1 and 2, and a third for non-scheduled poisons, are now provided in my shop and store-room, and in these the poisons in frequent use are easier of access than the rest. Thus the various methods are adopted according to the requirement of each poison. The special cupboards now recommended may be all very well for distinctly dispensing-businesses, but for general businesses it seems to me the above arrangements are all that are needed.

New Brompton.

A. STOOKE.

#### Income-tax Repayments.

SIR,—A comparison of the imperial revenue and expenditure for the current fiscal year with that of 1897-98 leaves no room for doubt that the Chancellor of the Exchequer will have a heavy deficit to face, and it is to be feared that another penny may be added to the income-tax. It is, therefore, the more necessary to ascertain whether one is entitled to any repayment. So many persons fail to recover overcharges through not lodging their claims in time, that we hope you will allow us to remind your readers that no claim for repayment of tax deducted from rents, dividends, annuities, &c., in respect of the year ended April 5, 1898, will be allowed unless the same be lodged before April 5 next. Where the income has been received and tax paid, a claim can now be made for four years. With few exceptions, all persons whose incomes do not exceed 700*l.* are entitled to exemptions or abatements, even when the income is said to be “free of income-tax,” and on an income not exceeding 400*l.* the amount repayable might amount to 42*l.* Claims can also be made in respect of diminution of business-profits (on furnishing a proper account, which is easily possible by using “The Taxpayers’ Cash-book”); losses in business can be set-off against income from other sources; partners in a business can claim abatement or exemption if their incomes are within the limits; married women having an income from a trade, profession, employment, or vocation, are in many cases entitled to have their incomes dealt with separately, where the joint income of husband and wife does not exceed 500*l.*; while a claim can be made by any person in respect of life-insurance premiums or contracts for deferred annuities even when the income exceeds 700*l.* We shall be glad to advise any of your readers gratuitously whether they can make a claim for repayment of income-tax, on their sending us full particulars of their incomes and a stamped addressed envelope.

Yours faithfully,  
THE INCOME-TAX ADJUSTMENT AGENCY.  
12 and 13 Poultry, London, E.C., March 1.

#### The Chemistry of Gout.

SIR,—I read with much interest the paper by Dr. Luff, hearing above title, in your issue of March 11. The chemistry of the gouty diathesis is undoubtedly very involved, and the series of ideas, facts, and opinions elaborated in this lecture are very instructive. My study of this subject has led me to entertain certain opinions, and the publication of Dr. Luff’s lecture brings these up. While sodium biurate is the chief cause of offence when deposited solid in the cartilages of a joint or minute capillaries, there can be no doubt the formation of calcium-hydrogen urate is common, and this compound is less soluble than the other. I think an excessive amount of common salt (sodium chloride), and, worse still, calcium sulphate (which is present in so many hard waters, beer, and stout), in the circulation leads to the formation and deposit of the insoluble urates. Another opinion is borne in on my mind in the treatment of rheumatism and gout. Perhaps there is no drug oftener used than sodium salicylate, and its usefulness is beyond dispute. I think, however, ammonium salicylate is much the better drug, since it is free from the objection of giving a sodium salt which offers the basic radicle already part of the evil. It may be added that actual experience has shown me the decidedly greater utility of the ammonium over the sodium compound. Although comparatively few chemists and druggists stock ammonium salicylate it can be prepared with the utmost readiness by the interaction of solution of ammonia and salicylic acid. For example, I have found 2 or 3 dr. of salicylic acid, dissolved in slight excess of dilute solution of ammonia, and made up to 6 or 8 oz with water, and a tablespoonful dose taken three or four times a day, acts almost like a specific in acute rheumatism.

I am, yours faithfully,  
West-end Laboratory, J. BRAIK MASON.  
266 Peith Road, Dundee.

#### The Medicine-stamp in Ireland.

SIR,—In reply to the letter written last week by Mr. J. C. McWalter, of the firm of J. Leonard & Co., of Dublin, we beg to state that he is misinformed when he states that he can purchase the new 1*l*. 1½*d.* size Hood’s sarsaparilla, stamped,

for 10s. 6d per dozen. Our net wholesale price is 11s. per dozen for stamped goods in London, no matter how large the quantity ordered.

Our esteemed friend, in a letter to us, does not seem to understand that Ireland is not a part of Great Britain, and that stamps are not required on medicines sold in Ireland. We never supply stamped goods in Ireland, as we have our own warehouse in Dublin, and ship goods direct from America to that place. You will notice that we allow 6d. per dozen difference in the revenue-stamps, besides delivering goods free in Dublin, and having the expense of keeping up a warehouse at that place. If Mr. McWalter wishes to buy stamped goods, we can supply him with the new 1s. 1½d. size f.o.b. London at 11s. per dozen, and he will find, after paying the carriage from here to Dublin, that the cost per dozen will be considerably more.

Furthermore, he states that we require the goods to be sold for not less than 1s. 1½d. per bottle. This is not so, although we should like to see every chemist obtain the full price. We have no conditions whatever about the cutting of prices, except that we have always asked the retail chemists to get the full price if possible.

Very truly yours,

C. I. HOOD & CO. (LIMITED).  
COLVER GORDON,  
Managing Director.

### Miscellaneous Inquiries.

207/14. *Exothecium*.—We have never heard of a demand for registered chemists from the large retail photographic dealers. Write to them direct if you think you could be of special use to them.

210/65. *Juba*.—Liquid Harness-blacking:—

|                      |     |     |     |     |              |
|----------------------|-----|-----|-----|-----|--------------|
| Yellow wax           | ... | ... | ... | ... | 3 <i>iv.</i> |
| Linseed oil          | ... | ... | ... | ... | 3 <i>ij.</i> |
| Yellow resin         | ... | ... | ... | ... | 3 <i>j.</i>  |
| Ivory-black          | ... | ... | ... | ... | 3 <i>iv.</i> |
| Prussian blue        | ... | ... | ... | ... | 3 <i>j.</i>  |
| Copal varnish        | ... | ... | ... | ... | 3 <i>j.</i>  |
| Spirit of turpentine | ... | ... | ... | ... | 3 <i>xx.</i> |

Melt the wax, resin, and linseed oil by heat; to this add the turpentine and varnish previously mixed. Mix the black and blue in a large warm mortar, and to them add the oily mixture gradually and stir to form a homogeneous product. To be applied with a brush, and rubbed up with a soft cloth.

This is one of the recipes from "Pharmaceutical Formulas," which is a book you would find of great use in your business.

209/23. *C. W.*.—Ol. camphor. essent. as imported is generally dark in colour; the colourless kind is sometimes freed from saffrol by fractionation, and, of course, such oil is quite destitute of camphor.

208/23. *A. J. N.*.—Lewis's Library, 136 Gower Street, W.C., is a subscription-library devoted entirely to scientific and medical works.

209/39. *W. & P.*—To Remove Mildew from Pictures use a weak solution of chlorinated lime. The solution must be applied with care, and be well washed off, or the engraving will be damaged.

### Information Wanted.

The Editor will be obliged for replies to the following from any who can furnish the information.

205/55. London agent for Zeilz, perfumer, of Saxony.

215/2. Address of Messrs. Osmond, cattle-oil makers, late of Jewry Street, E.C.

213/60. *E. J.* wishes to know where he can obtain luminous paper, which he wishes to use to cover poison-bottles, so as to make them distinguishable in the dark.

Pearl White.—Messrs. Rouse Brothers write to call our attention to an answer we gave to a correspondent (*C. & D.*, March 4, page 382), in which pearl white was mentioned as a synonym for bismuth subnitrate; it should have been bismuth oxychloride.

### Trade Report.

The prices quoted below are the bottom prices obtained for bulk quantities by importers and manufacturers, who do not supply retailers. They are in many cases exclusive of various charges.

42 Cannon Street, London, E.C.: March 16.

*Quinine* and the "flue" are the common complaints. The former, say some, keeps business in other articles away, which means that business generally is steady, unexciting, and paying, and that quinine is energetic, exciting, and highly profitable to a few. Quinine-manufacturers have put 2d. per oz. on their prices this week.

Whether camphor or shellac will be the next speculative article is hard to say. The shellac-people are usually well zareba-ed for speculators, but the defence seems weak just now, and stocks are low. As to camphor, we hear from Hong-Kong that the Japanese Government, who have been looking in various directions for money lately, have finally decided to take the production of camphor in Formosa into their own hands on July 1 of this year, and the immediate effect of this has been to send up prices in Hong-Kong. This move of the Japanese Government is not likely to create absolute monopoly, but that they will endeavour in the first place to conserve the Formosan forests, secondly, control the output, and thirdly, derive revenue by selling concessions to firms already engaged in the camphor-trade. In one sense this is good news—it ensures a steady supply of the article.

Drug sales were held to-day and are dealt with separately in this report; as to other articles the subjoined table shows how some of them stand:—

| Higher                 | Firmer           | Lower                |
|------------------------|------------------|----------------------|
| Buchu                  | Ammonia sulphate | Ergot                |
| Coloxynt               | Anthracene       | Menthol              |
| Ferri et quininae cit. | Camphor          | Oil, peppermint      |
| Quinine                | Musk             | Opium                |
| Sarsaparilla           | Oil, turpentine  | Orris                |
|                        | Wax (bees')      | Pepper               |
|                        |                  | Pyridine             |
|                        |                  | Quicksilver(seconds) |

The following are the more important arrivals of drugs from March 9 to 14:—Aloes (Bombay), 105; anise star (from Hamburg), 327; asafetida (Bombay), 289; buchu, 37; calumba, 82; camphor, 34; cardamoms, 43; cascara sagrada, 496; castor oil (Belg.) 56, (Ital.) 37, (E.I.) 830, (Fr.) 247; cinchona (Ceylon), 130; cod-liver oil, 416; croton-seed, 21; cubeb, 80; dragon's-blood, 8; gamboge, 2; gentian, 10; gum olibanum, 582; musk, 2; opium, 28; peppermint oil, 26; quillaia, 1,617; quinine, 72; sandalwood, 670; scammony-root, 21; senna (Tinn.) 43, (Alex.) 25; vanilla, 4; wax (Japanese), 156. The arrivals in Hamburg for the week ending March 11 included: cardamoms (Ceylon), 64; coriander, 123; fenugreek, 405; wax (African), 290; and tragacanth, 26.

### Attar of Roses (Limited).

The *Financial News* makes a point of a press-cutting in regard to an alleged attempt which is to be made by a Madras company to plant an acre or two of Wynnaid land with roses, with a view to the manufacture of "attar." This is a terrific plunge for the Madras company to make. It may upset the market as it has never been upset before, because it rarely happens that a whole acre—capable of producing about 10*l.* worth of otto—is laid bare at one fell swoop for such an odorous purpose.

### Another Java Quinine-factory.

We hear that the establishment of a quinine-factory at Pengalengan, Western Java, so long talked about, will soon be an accomplished fact. Several estimates and other documents have been sent in to a well-known quinologist, who has reported favourably. The sole agents of the factory will be Wellenstein, Krause & Co., of Batavia. The capital, in all probability, will be German.

### Tincture Drawback.

We believe that the small sub-committee of the Drug Committee of the London Chamber of Commerce have finished the work on the schedules which they have been preparing on lines suggested by the Inland Revenue authorities, and the lists have been sent to Somerset House for approval. The new lists are, we understand, exceedingly comprehensive so far as actual export business is concerned, and all interests have been carefully looked after, with due respect to the expanding work of the Excise Department charged with it. Agreement has been practically arrived at, but the new general order referring to the list may not appear until the Budget programme has been decided upon, i.e., when it is known what is to be done regarding the spirit-duty.

### Uganda Aloes

The consignment of aloes which has been referred to in our last two reports was placed on show yesterday, and a better inspection of it was thus obtained. The aloes created much interest. It has been sent in three distinct forms—viz., (1) square cakes weighing 1 lb., each wrapped in crimson paper with an imprint which sets forth that it is pure and is "Crown Brand" aloes; (2) pieces weighing 2 oz. to 3 oz. in a canvas packing; and (3) fine powder and coarse grain put up in 4-lb. cotton bags like granulated sugar. The sample which we first described had a distinctly aromatic odour, like good Socotrine aloes, but we failed to obtain yesterday any so nice. The odour somewhat resembles that of Cape aloes. The fate of the parcel is mentioned under drug-auctions.

### Loss of Quinine on Keeping.

Sulphate of quinine contains, when newly made, 15 per cent. of water, chemically combined, or, strictly speaking, as water of crystallisation. This water flies off with extraordinary facility. Thus, by merely exposing it to the air, and without heating, 11 out of the 15 per cent. is lost in a short time, while even in sealed tins water escapes, especially if the temperature is above the normal. In consequence of this fact and the large transactions which have been made lately in old quinine sulphate, some as long as twelve years in the warehouse, brokers have had to consider that their clients get 1,000 oz. for every 1,000 oz. they pay for; and at a meeting held on Friday—Mr. C. Woodhouse presiding, and representatives of Messrs. C. M. & C. Woodhouse, Lambert & Strong, Wilson, Smithett & Co., Jenkin & Phillips, Marshall & French, Dalton & Young, French & Plucknett, Hicks & Ashmore, Sanderson & Co., G. T. Benton & Son, and S. Figgis & Co. being present—the following resolution, proposed by Mr. Hicks and seconded by Mr. Bates, was agreed to:—

Any quinine tendered against this contract which arrived previous to January 1, 1890, shall, at the buyer's option—such option to be declared on or before the Wednesday preceding the prompt—be taken with average re-weights, or 2 per cent. allowance in lieu of re-weights. (Re-weights hold good for ten years.)

The 2-per-cent. allowance will not, of course, represent all the loss in weight; but it is a fair average for warehouse-conditions, and it is well to remember that, in spite of the loss, there is as much quinine sulphate in the packages as before, only water having been dissipated.

### Heavy Chemicals.

[These prices are for market-centres other than London.]

There are few fluctuations just now in the prices of the main products of the heavy-chemical market, and there is nothing of very special importance to be reported. A fairly good all-round business, pretty well up to the average, is being transacted both for home and export.

**ALKALI PRODUCE.**—Caustic soda is steadily maintained at late rates, and is moving well for home, but the demand for export is rather quieter just now. Bleaching powder in good demand at unchanged figures. Soda crystals, saltcake, and ammonia alkali are all steady and in fair request. Silicates of soda are moving well, and tend a shade higher. Present figures are: 140° Tw., 3l. 5s. to 3l. 7s. 6d.; 100° Tw., 3l.; and 75° Tw., 2l. 15s., f.o.b. Liverpool or Tyne, in usual casks.

**COAL-TAR PRODUCTS.**—Carbolic acids are somewhat dull at the moment at unchanged rates. Prices, however, are fairly steady, and scarcely likely to decline in view of the heavier demand shortly to be expected. Crude, 75 per cent., 2s. 4½d.; 60 per cent., 1s. 11d. to 1s. 11½d.; crystals, 34–35°C., 6½d. to 6½d.; and 39–40°C., 6½d. to 6½d. Anthracene is firmer: A grade, 3½d. to 3½d.; B grade, 2½d. to 3d. Pitch firm at 2s. 9d. to 2s. f.o.b. East Coast. Aniline salts unchanged, at 4d. to 4½d. per lb., as is also aniline oil, at 4½d. to 4½d. Pyridine a shade lower, at 4s. 9d. to 4s. 10½d. Toluol, 1s. Benzols are dull: 90 per cent., 8d.; 50 per cent., 8d. Naphthas somewhat easier, but little change in quotations; solvent naphtha, 90 per cent., 1s. 2d.; 95 per cent., 1s. 4d.; crude, 30 per cent., 3½d. Solvent wood, colourless, 3s. to 3s. 3d., according to quantity; and miscible, 4s. to 4s. 3d.

**SULPHATE OF AMMONIA.**—Firm, with a slightly higher tendency than last quotations. Exports from Leith last week amounted to 501 tons.

**SULPHATE OF COPPER** is easier, but prices still stand; Anchor 25l. 10s.; and Liverpool, 25l.

### Liverpool Drug-market.

*Liverpool, March 15.*

**CASTOR OIL.**—Calcutta good seconds remain at 2½d. per lb., with but little business passing, though at a shade under this considerable quantities might change hands. Madras good seconds are almost wanting, and the price nominally is 2½d. First-pressure French is firm at 2½d., and higher prices are being asked for this grade to arrive.

**CHILLIES.**—The season for the new is practically at an end, and so far the arrivals have been exceedingly limited; 20 bags of fair have been sold on private terms, but fine bright red are worth 45s. to 47s. 6d. per cwt.

**KOLA-NUTS.**—Thirty-two bags of sound dry have changed hands at 1½d. to 2d. per lb.

**POTASHES** are firmly held at 24s. to 24s. 6d., while only a nominal business has been done in pearlashes at 33s. to 34s. per cwt.

**TURPENTINE** again dearer, and sales have been effected at 36s. 6d. Importers and holders both say that the article is going to be dearer.

**CARNAUBA WAX.**—Considerable transactions continue to be a feature in this article, 90 bags of yellow selling at 65s., and 104 bags of ordinary selling at 38s. 6d., with a continued inquiry.

**GINGER, AFRICAN.**—One sale of 21 bags has been made from the quay at 20s. 6d., but prime sound root is firmly held in store at 22s. to 22s. 6d., with an upward tendency.

**QUILLIA BARK.**—Arrivals continue, but holders are firm at 15l. to 15l. 10s., it being reported that 50 tons had been sold at the former price.

**BEESWAX.**—The demand continues steady, and for small stocks remaining in Chilian and Peruvian 7l. to 7l. 15s. is asked. A sale of 10 cwt. Gambier is reported at 6l. 15s.

**HONEY.**—Californian continues to meet with a fair demand, and 45s. is still the price for pale liquid. Chilian is moving slowly at prices ranging from 21s. 6d. to 30s. per cwt.

### German Drug-market.

*Hamburg, March 14.*

The position of our drug-market has shown little change since last week, and there are only a few articles moving briskly.

**STAR-ANISE** is steady; spot is held for 205m. to 208m. per 100 kilos.

**CAMPHOR (REFINED)** is quiet. There were second-hand sellers at 335m. per 100 kilos. in the early part of the week, but to-day 340m. was asked again.

**CONDURANGO-BARK.**—In better demand, at 65m. to 70m. per 100 kilos.

**CEVADILLA-SEED** is firm, at 80m. per 100 kilos.; importers are holding for better prices.

**IPECACUANHA.**—Rio is not offered. Cartagena: good supplies are on the way, and are offered at 16m. per kilo.

**MENTHOL** is quiet and lower, at 15½m. per kilo.

**NUX VOMICA.**—Firm, at 17m. per 100 kilos.

**QUILLIA.**—Large supplies are expected, which will probably depress the market.

**SPIRITS OF TURPENTINE.**—Very firm and advancing; spot is held to-day for 70½m. to 71m. per 100 kilos.

**QUININE** is very firm; manufacturers quote to-day 47m. per kilo.; second-hand, 45½m. to 46m. per kilo. .

## American Market.

New York, March 7.

Business continues good, but there are no important developments. The market generally has a healthy tone, and there is no lack of confidence in the future.

BUCHU-LEAVES are scarce; the quotations for both short and long leaves show an advance. Short can be had at 14c., but some holders will not accept less than 16c. Long are steady at 17c. to 18c.

CINCHONIA.—Consequent on the advance in the price of bark, and a heavy demand, manufacturers have advanced quotations to 18c. Sales aggregating 40,000 oz. were made prior to the advance. Second-hands offer sparingly at 17c.

COCA-LEAVES are scarce, and there seems little prospect of fresh supplies in the near future from Peru. Truxillo are strong at 20c., and Huancayo at 24c. to 25c.

JAMAICA GINGER.—New crop is coming forward, and quotations show a decline to 12c. to 16c. for unbleached, and 17c. to 19c. for bleached.

OILS, ESSENTIAL.—Citromella is firmer, in sympathy with the London market; holders ask 25c. to 26c. for drums. Wintergreen is scarce and tending upward. Quotations are strong at \$1 to \$1.10. Sassafras is in good demand, and firm at 34c. to 36c. Wormwood very scarce, and moving upward. \$3 to \$3.50 is asked for pure oil.

OPIUM continues to weaken, and the market has dropped to \$3, at which prices are steady. Competition seems to be the reason for this drop, as the cost of importation is about equal to the present selling-price.

QUININE continues to excite interest, and one foreign maker has advanced prices to 30c. Domestic manufacturers continue to quote 28c. to 32c., but offerings are cautious and limited, and no business of consequence is passing.

SARSAPARILLA (MEXICAN) is scarce, and most holders ask 11c. to 11½c. Considerable sales have been made, and small lots are still obtainable at 10½c.

## Cablegrams.

BERGEN, March 16, 11.30 A.M.:—The fishing continues in its miserable condition, and the results come out very bad, the catch so far being 8,309,000 cod, compared with 12,331,000 at the same time last year. The yield of unrefined oil will be 8,435 barrels, against 8,459. In consequence of this the market has become firmer at 60s. per barrel, f.o.b.

\* \* \* \* \*

HAMBURG, March 16, 12.35 P.M.:—A firmer tone prevails on this market. Quinine is quoted at 46½m. per kilo. Refined camphor has advanced in second hands to 350m. per 100 kilos. Turpentine is firmly held, 71m. per 100 kilos. being the closing price.

\* \* \* \* \*

NEW YORK, March 16, 3.26 P.M.:—We have had a week of active business, especially in quinine, which is in a strong position, at 32c. per oz. Buchu-leaves are dearer, at 16c. per lb.; but golden-seal root is easier now, at 63c. per lb. Western oil of peppermint is in a weak position, and 75c. buys. Ergot is also weak, at 22c. for German and 26c. for Spanish. Quillaia-bark is 4c. per lb., and easily obtainable at that.

## London Markets.

ACIDS, CITRIC AND TARTARIC, are quiet and unchanged.

BENZOLS are dull at 8d. per gallon for 50-per-cent. and 90-per-cent.; pure is 1s. per gallon, spot.

BORAX.—Higher rates are expected soon, especially by German refiners, who have instructed their agents here not to accept orders until permitted by them.

CAFFEINE.—The following are the current quotations:—Citrato, B.P., 11s. 6d. in 1-lb. bottles, 11s. 2d. in 5-lb. bottles; pure crystals, 14s. 7d. in 1-lb. tins, and 14s. 4d. in 5-lb. tins.

CINCHONA.—Further particulars are to hand regarding the auctions to be held in Amsterdam on March 23. There will then be offered 6,846 packages, weighing together 537,076 kilos. (1,181,567 lbs.). Of this quantity 386,049 kilos. is manufacturing bark, containing the equivalent of 20,297 kilos (710,395 oz.) quinine sulphate, and the remainder, 151,027 kilos, is pharmaceutical bark, containing the equivalent of 3,275 kilos. (114,625 oz.) quinine sulphate. The average yield in the manufacturing bark is 5.26 per cent., against 5.39 per cent. in February, and 5.21 per cent.

average of the ten auctions held last year. The shipments from Ceylon from January 1 to February 21 were 100,859 lbs., as compared with 107,881 lbs. at the corresponding period of last year. The Java shipments from February 28 to March 15 are reported to be 350,000 Amst. lbs., a slight improvement upon last month, but the information is chiefly valuable as showing the keenness of the crisis, fortnightly returns being rarely interesting. In auction, fair bold Calisaya, country damaged, sold at 9d. per lb., and sound Maracaibo at 3½d., and damaged at 1½d. to 3½d., according to class. Dark chippy red Guayaquil sold at 2d. to 4d., and East Indian chips, valued at 2½d., were bought in at 6d., nominally.

FERRI ET QUININE CIT. has been advanced ½d. per oz., now 8d. in vials; 7½d. per 100-oz. lots, and 6d. in bulk.

GALLS.—Persian are quiet, but firm; a good business has been done in white for forward delivery at full values, and small sales of blue Smyrna have been made at 57s. 6d. per cwt. on the spot.

LOBELIA.—Loose herb in bags of 75 to 100 lbs. is offered at 3d. per lb. c.i.f. or 3½d. to 4d. spot; pressed in packages is at from 4¾d. to 5½d. c.i.f.

MORPHIA.—Powder hydrochloride is now selling at 4s. 6d. per oz., and codeine is firm at 12s. 3d. to 12s. 6d., both being in good demand.

OIL, COD-LIVER.—Prices remain as they were. The principal feature of the week is the issue of a circular by a Norwegian maker who has been pushing business here, and has advanced his price, by circular, 5s. per barrel. Our Bergen correspondent, writing on March 11, states that the exports from that port to date were 1,613 barrels, against 1,601 last year at the same time. The conditions as to the fishing and the market were as stated in the cable last week.

OIL, TURPENTINE.—Firmer, American on the spot being worth 32s. 9d. per cwt.

OPIUM.—In a weak position. Sales have been made in Smyrna this week for American at the parity of 7s. 9d. per lb., and in consequence holders on this market are anxious to realise their rather heavy holdings, and are pushing sales at reduced rates. Small sales of good medium Persian have been made at 10s. to 10s. 6d. per lb.; fine is held for 11s. per lb.

SMYRNA, March 3.—The market this week opened lower, but at the close a better feeling prevailed. Sales for the week amount to 45 cases of current and Karahissar talequale at the equivalent of 7s. 9d., 7s. 10d., 7s. 11d., and 8s. per lb., c.i.f., for exportation. The arrivals were 1,376 cases, against 3,382 cases.

Another correspondent, writing on March 11, reports:—Owing to favourable weather, accompanied with rain, our market has shown further signs of weakness, and when the news of a further drop in prices from America reached us sellers were all anxious to supply the small demand there was—at 8s. to 8s. 6d. as to quality, and these figures may be considered "safe." About 30 cases in all changed hands, 29 of which were for U.K. The arrivals are 1,276, as compared with 3,303.

CONSTANTINOPLE, March 10.—After a drop to 7s. 9d. at the commencement of the week, the market has stiffened considerably, and closes firm to-day at the parity of 7s. 10½d. per lb., f.o.b., for druggists'. Fair purchases have been made both here and in Smyrna for American account. There has been a heavy fall of snow in the interior, followed by sharp frosts. Consequent on this holders are showing a firm attitude, and there are fears that this severe turn of the weather may jeopardise the young plants. Sales on this market during the past week amount to 35 cases.

OTTO OF ROSE.—During the past season a mere fraction of the normal sales of otto have been made in London, and although the Bulgarian exporters are pressing for higher rates, as noted last week, it is a case of "Don't you wish you may get them?"

QUICKSILVER.—Second-hand holders are feeling weak. They dropped to 8s. 2d. 6d. per bottle on Tuesday, and let the liquid metal go at 6d. less yesterday. It can be bought at 8s. 1s. 3d. to-day. Rothschild's are firm, at 8s. 5s.

QUININE.—The speculative movement has continued cautiously since our last. There is now a disposition to proceed with deliberate circumspection, but the position is undoubtedly firm, and an advance of 2d. per oz. by the manufacturers has helped to tone it up. As to the advance it may be noted that manufacturers are exceedingly busy

filling contracts made at the low rates, and as they have to buy dear bark they are compelled to stave off fresh business by declining it or advancing prices, and they have done both, the quotations for 1,000-oz. lots of the sulphate in 100-oz. tins being as follows:—Amsterdam, 1s. 6d. per oz.; Gold and Silver, 1s. 5d. per oz.; Powers & Wightman, 1s. 5d. per oz.; Howards, 1s. 6d. per oz.; Whiffen, 1s. 5½d. per oz.; Zimmer, 1s. 5d. per oz.; Boehringer, 1s. 5d. per oz.; Brunswick, 1s. 5d. per oz.; Imperial, 1s. 4½d. per oz. The speculative business of the week has not been quite so voluminous as last week, but the prices paid are about 1d. per oz. higher, the last transactions in the speculation brands being 1s. 4½d. spot and 1s. 5½d. for August. No business to-day, but the spot quotation is 1s. 5d. Speculators are becoming anxious about the May deliveries, as, it is said, more has been sold for that month than can at present be obtained. Should this be the case there is no saying what the price will be then, for the manufacturers will not move a finger to take the speculators out of their trouble. A bid of 1s. 3d. per oz. was refused for the Amsterdam quinine offered in auction, the broker saying he would take 1s. 4½d.; another lot marked "M. & Co." of unknown origin, was limited at 1s. 4d.

SEEDS.—*Anise* slow of sale; good Russian brings 18s. 6d., common old 17s. per cwt. *Caraways* firm at 22s to 22s. 6d. per cwt. for ordinary Dutch. *Coriander* quiet and unchanged. *Canary* weaker for common, but firm and rather dearer for fine; Turkish is offering at 26s. 6d. to 27s., according to quality. *Cumin* in more demand, with sales of Mogador at 24s. 6d. per cwt. *Fenugreek* is selling at 7s. 6d. per cwt. for large parcels.

SPICES.—Singapore black *Pepper* is lower, but other articles are without change. At the sales on Wednesday Cochin *Ginger* was dull, the rough kinds being bought in; boldish cut sold at 58s. per cwt., medium at 39s., and small at 32s. per cwt. There was more competition for Jamaica; dark lean to ordinary brought 57s. to 63s., and washed from 75s. to 92s. per cwt. for ordinary to bold. Zanzibar *Cloves* quiet; a small lot of barely fair sold at 3½d. per lb. A parcel consisting of 35 bales of fine bright picked Zanzibar was offered, and met with spirited bidding up to 5d. per lb., but, the owner's idea of the value being 6d., the cloves were bought in. *Pimento* slow, and the lots offered were held for 4½d. per lb. *Nutmegs* and *Mace* dull and unchanged. Zanzibar *Chillies* rather easier; fair red stalky sold at 33s. per cwt. *Pepper* lower: Singapore white sold at 8½d. per lb. for good fair, and black at 5½d. to 5½d. per lb. for greyish to good; the price to arrive is lower, with business in March-May shipment at 5½d. per lb.

WAX, OERESIN, is quoted 44s. per cwt., c.i.f., for natural, and 45s. for orange, m.p. 160° to 165° F.

### Drug-auctions in London.

The sales to-day were exceptionally heavy, they being the first since February 16, and as the next auctions are due in Passion Week they are to be postponed until April 13, so it looks as if monthly sales come as a natural consequence.

|                   | Offered | Sold |                 | Offered | Sold |
|-------------------|---------|------|-----------------|---------|------|
| Aconite-root      | 28      | 0    | Canella alba    | 25      | 0    |
| Albumen           | 10      | 3    | Cannabis indica | 220     | 10   |
| Aloes (various)   | 253     | 26   | Cardamoms       | 594     | 245  |
| Ambergis          | 5       | 0    | Cascarilla      | 12      | 5    |
| Aniseed           | 50      | 0    | Castor-seed     | 1       | 0    |
| Anise, star       | 10      | 0    | Chillies        | 20      | 0    |
| Anatto-paste      | 3       | 0    | Chiretta        | 16      | 0    |
| Anatto-seed       | 168     | 0    | Cinchona        | 107     | 74   |
| Antimony          | 70      | 30   | Civet           | 2       | 0    |
| Araroba           | 22      | 0    | Coca-leaves     | 11      | 6    |
| Argol             | 33      | 0    | Coloxynt        | 16      | 12   |
| Asafetida         | 211     | 26   | Coriander-seed  | 30      | 0    |
| Asphaltum         | 32      | 0    | Croton-seed     | 48      | 0    |
| Balsam, Canada    | 6       | 0    | Cubeb           | 176     | 0    |
| Copaiba           | 11      | 6    | Cumin-seed      | 25      | 0    |
| Peru              | 4       | 1    | Cuttlefish-bone | 45      | 9    |
| Tolu              | 46      | 3    | Damiana         | 2       | 0    |
| Benzoin (various) | 211     | 46   | Dill-seed       | 110     | 0    |
| Buchu             | 26      | 18   | Dragon's-blood  | 14      | 2    |
| Calabar-beans     | 20      | 0    | Ergot of rye    | 48      | 4    |
| Calumba           | 165     | 165  | Fennel-seed     | 20      | 0    |
| Camphor (refined) | 53      | 38   | Galangal        | 22      | 0    |

|                     | Offered | Sold |                | Offered | Sold |
|---------------------|---------|------|----------------|---------|------|
| Galls               | 14      | 0    | Oil, orange    | 1       | 0    |
| Gentian             | 140     | 9    | patchouli      | 1       | 0    |
| Gum ammoniacum      | 34      | 0    | peppermint     | 14      | 0    |
| arabic...           | 187     | 19   | petit grain    | 1       | 0    |
| galbanum            | 13      | 3    | pimento        | 6       | 6    |
| gamboge             | 45      | 2    | rose (Bombay)  | 21      | 0    |
| kino                | 16      | 0    | sassafras      | 3       | 2    |
| mastiche            | 18      | 0    | wintergreen    | 1       | 1    |
| myrrh               | 86      | 25   | ylang-ylang    | 2       | 0    |
| sandarac            | 4       | 0    | Orange-peel    | 52      | 2    |
| tragacanth          | 7       | 1    | Orris-root     | 2       | 0    |
| Honey, Jamaica      | 44      | 16   | Pistachio-nuts | 4       | 0    |
| Californian         | 485     | 0    | Pooray         | 5       | 0    |
| Ipecacuanha (Cart.) | 19      | 1    | Puree          | 1       | 0    |
| (Rio)               | 36      | 15   | Quinine, es.   | 7       | 0    |
| Jalap               | 53      | 20   | Rhatany        | 6       | 0    |
| Kamala              | 18      | 0    | Rhubarb        | 343     | 46   |
| Kola-nuts           | 15      | 3    | Rose-leaves    | 1       | 0    |
| Lime-juice          | 28      | 0    | Saffron        | 20      | 0    |
| Liquorice-root      | 46      | 5    | Sarsaparilla   | 79      | 57   |
| Manna               | 3       | 3    | Scammonium     | 19      | 0    |
| Matico-leaves       | 8       | 0    | Scammony-root  | 80      | 0    |
| Menthol             | 6       | 0    | Senega-root    | 15      | 0    |
| Musk                | 28      | 4    | Senna, Alex.   | 125     | 6    |
| Nux vomica          | 20      | 0    | Mecca          | 10      | 0    |
| Oil, anise (star)   | 9       | 0    | Tinnevelly     | 129     | 45   |
| bay                 | 13      | 0    | Soy            | 35      | 0    |
| castor (E. I.)      | 43      | 0    | Squills        | 10      | 0    |
| cinnamon            | 40      | 0    | Strophanthus   | 3       | 0    |
| citronella          | 13      | 0    | Tamarinds      | 60      | 50   |
| cloves              | 2       | 0    | Teafuff        | 5       | 0    |
| cod-liver           | 35      | 0    | Tonka-beans    | 15      | 6    |
| eucalyptus          | 26      | 0    | Turmeric       | 336     | 0    |
| geranium            | 8       | 0    | Vanilla        | 98      | 24   |
| lavender (Ang.)     | 10      | 0    | Vermilion      | 3       | 0    |
| lemongrass          | 18      | 0    | Wahoo-bark     | 4       | 4    |
| lime                | 2       | 1    | Wax (bees')    | 213     | 115  |
| neroli              | 3       | 0    | Yellow berries | 31      | 0    |

### The late Mr. Barron.

While Mr. Figgis was selling his goods to-day he made a touching reference to the late Mr. Richard Barron, who, he said, was one of the good old English gentlemen. He was a man who had the courage of his opinions, was always straight, and whose word was his bond. Mr. Figgis felt sure all present would join with him in giving expression to their sympathy by passing a vote of sincere condolence with Mr. Barron's family. Mr. F. Harwood Lescher, in speaking as a personal friend of Mr. Barron's, said he was sorry that the President of the Drug Club was not present to follow Mr. Figgis. In Mr. Barron they had lost a distinguished member of their body. His memory carried him back to the time when the drug-sales were held in Garraway's coffee-house, when Mr. Ellis (of Ellis & Hale) used to sell. Mr. Barron occupied a seat at that time by the speaker. There were some people who said Mr. Barron was a proud man, but in these days of commercial pitfalls Mr. Lescher thought that proper pride was a very good thing to hold fast by. Mr. Barron was proud of many things—especially proud of the relations between druggists and brokers. Though proud, he was a kind man, and many of his acts of generosity were done so quietly as to be unknown. He was the very soul of honour, and they all deeply deplored his loss. Mr. Andrew Devitt, on behalf of the drug-brokers, desired that a vote of condolence be conveyed to Mrs. Barron and her family. Mr. R. N. Dalton seconded, and the vote was passed in silence. Mr. Ralph K. Harvey briefly thanked the room for the references to his late partner, and promised to convey the kind resolution to Mrs. Barron and her family.

ACONITE—Good German root is very scarce and inquired for. Stocks abroad are light, and nothing is available. In auction usual mixed Japanese was bought in at 28s. per cwt. nominally.

ALBUMEN.—Partly sold at 1s. 9d. per lb.

ALOES.—The offerings to-day included a parcel of 105 kegs new crop Socotrine aloes from Bombay, of fair brown colour, but very soft and of strong odour; 60s. was bid and refused, the bought-in price being 80s. nominally. A few good hard brown, in kegs, sold at 75s. per cwt. For Curacao aloes in boxes of fair brown livery and part capey, 14s. 6d. was bid and refused; business was afterwards done privately at 15s. The Uganda aloes, to which fuller reference is made in an earlier paragraph, sold with good competition at 5l. 2s. 6d. per cwt. for 1-lb. cakes and smaller pieces, and 60s. to 65s. for the 4-lb. bags of powder and loose grain. No Cape offered.

ANNATTO-SEED.—No business was done publicly, although abundant supplies were offered; 3½d. per lb. was the limit placed on good bright Madras.

ANTIMONY.—Privately Regulus is quoted 39l. per ton, which is slightly dearer. Crude is worth 21l. per ton, c.i.f., or 23l. spot. Japanese crude sold in auction at 24l. per ton.

ASAFTIDA.—Owing to the extreme fog on Tuesday, when asafetida was supposed to be on show at the London Docks, it was impossible to inspect the samples properly, and it was intimated to-day that the new arrivals would be offered next Thursday at 11 o'clock. It would give buyers satisfaction if some arrangement for exhibiting the drug nearer the City could be made. The asafetida sold was mostly common stoney stuff, and fetched 35s. to 40s. per cwt. Some good medium brown sold at 50s. to 54s., and good pinky blocked teat at 60s. to 70s. per cwt.

BALSAM, COPAIBA.—Small sales of cloudy Maranham have been made privately at 1s. 6d. per lb. Fair to dark cloudy Maranham from Liverpool was bought in nominally at 1s. 8d. per lb.; good four-fifths filtered Cartagena of medium consistency sold with fair competition at 1s. 3½d. to 1s. 4d. per lb., and thick Central American at 1s. 3d. per lb.

BALSAM, PERU.—Good unfiltered thick sold at 8s. 3d. per lb.

BALSAM TOLU.—Good hard realised 1s. 6d. per lb.; 1s. 3d. was bid and refused for another parcel.

BENZOIN.—There was nothing very fine in Siam gum benjamin offered to-day, and the strings were bought in with startling rapidity. The lot sold was an old stager, consisting of picked tear, accompanied by little bags of smaller fry—price 10l. 10s. per cwt., subject. Sumatra was in fair demand, and some darkish, but full flavoured and genuine, sold at 9l. 10s. Slightly false-packed seconds, with bold centre white almonds, fetched 6l. to 6l. 7s. 6d., and lower grades 5l. 7s. 6d. to 5l. 15s. Fair Penang gum sold at 80s. per cwt. Privately good glassy Penang is held for 70s. per cwt.

BUCHU.—Dearer, good bright round green leaves selling readily at 6½d. per lb., and ditto, part stalky and part yellowish, at 4d. per lb.: for good round and part stalky 4½d. was bid and refused.

CALUMBA.—Fine pale washed realised 40s. per cwt.: ordinary brownish, 18s. to 19s. 6d.; bold, but rough and poor, 11s. 6d. to 13s.; and mouldy and wormy, 8s. per cwt. Sales of common rough sorts have been made privately at 11s. per cwt.

CAMPHOR.—We have received full confirmation of the monopoly already referred to. Yesterday Hong-Kong advised 145s. per cwt., c.i.f., as the price for Chinese, while it was being offered here in second hands at 127s. 6d.; Japanese was 140s. nominally, and 132s. 6d. to 135s. in second hands—all c.i.f. terms. A parcel of Japanese refined, offered without reserve, sold at 1s. 5½d. to 1s. 5¾d. per lb. for ½-oz. tablets; 1-oz. tablets were bought in at 1s. 8d. to 1s. 9d. Little is now offering here except a parcel of 200 piculs Japanese. For Continental account the same quantity was sold yesterday at 132s. 6d. per cwt.

CANNABIS INDICA.—In large supply. Privately small sales have been made at 6d. per lb. for good green tops. Good green tops sold at 6d. per lb.

CARDAMOMS.—Medium qualities sold at recent rates, but the best and lowest of the Mysores were cheaper. The first supplies of Mangalore for the season were offered, and mostly sold. Some of these are of fine quality, and brought 3s. 8d. to 3s. 10d. per lb. for fine bold bleached heavy, full-seeded; ditto, medium size, 3s. 4d.; lean, 3s. 2d.; fair bold leanish, 3s. 7d. to 3s. 8d.; medium lean, 3s. 3d. to 3s. 5d.; ditto small and brown, 2s. 10d. to 2s. 11d.; very small lean brown, 1s. 11d. to 2s.; and good bold splits, 2s. 4d. Ceylon-Mysore: fine bold pale round, 3s. 11d. to 4s. 4d.; medium ditto, 3s. 3d. to 3s. 10d.; good split, 3s. 11d.; small medium white, 3s. 2d. to 3s. 4d.; good brownish longs, 3s. to 3s. 1d.; pale 3s. 3d.; ditto, medium, 2s. 5d. to 2s. 9d.; small ditto, 2s. 1d.; small to medium long pale, 2s. 8d. to 2s. 11d.; dry very small pale, 2s. 4d.; splits, 1s. 8d. to 1s. 10d., (very husky) 1s. 9d.; good bold splits, 2s. 4d.; and pickings,

1s. 11d. per lb. Ceylon Malabar: good medium pale, 2s. 3d. to 2s. 5d.; small to medium brown, 1s. 6d., 1s. 7d., 1s. 8d.; good brown splits, 1s. 9d.; and long lean, 2s. 1d. Long wild Ceylon were not in request. Seeds: grey, 2s. 4d. to 2s. 5d.; good brown, 2s. 8d.

The shipments from Ceylon from January 1 to February 21 were 83,294 lbs., and for the week ending February 21, 18,647 lbs.

CASCARILLA.—The stock here remains small, and holders are very firm. Siftings only were offered and sold at 25s. per cwt.

COCA-LEAVES.—Good broken green Ceylon realised 8½d. to 11d. per lb.

COLOCYNTH.—Dearer; small to medium fair Turkey apple sold at 11d. per lb. subject; other parcels sold privately.

DRAGON'S-BLOOD.—Very ordinary dull lump sold at 5l. 5s. per cwt.

The shipments from Singapore from January 1 to February 7 were 30 piculs, of which 13 were shipped to London per *Nestor* on February 4.

ERGOT.—A sick article, because there is plenty of it. Privately sound Russian can be had at 1s. 4d. per lb., or even less, and Spanish 1s. 11d. in original packages.

GENTIAN.—Good Spanish is limited at 16s. to 16s. 6d. per lb., and there have been sales at that.

GUM ARABIC.—Business privately in Soudan sorts has been small, but importers remain very firm. Fair picked Aden sorts sold at 70s. per cwt. Trieste small grain, at 6l. 12s. 6d., and half-a-dozen packages of various grades of Trieste, offered without reserve, sold at 4l. 12s. 6d. to 8l. 10s. We hear from the Soudan that supplies there are almost exhausted.

GUM, GALBANUM.—A fairish lot of feeble flavour sold without reserve at 6½d. per lb.

GUM GAMBOGE.—There was paid 6l. 5s. per cwt. for fair broken and partly blocky pipe, rather darkish colour.

The shipments from Singapore from January 1 to 25 were 7 packages only.

GUM MASTISCHE.—Privately the market is overstocked, and further consignments are on the way.

GUM MYRRH.—Fair Aden sorts sold at 45s. to 46s. per cwt.

GUM TRAGACANTH.—A moderate business has been done this week in the medium and lower grades at previous values. Siftings and pickings have also sold well. Bussorah hog-gum has sold at 50s. per cwt. for good quality. Poor fourths sold without reserve at 5l. 5s. per cwt.

HONEY.—Part set white Jamaica sold at 22s. to 23s., and fair set seconds at 21s.; a string of 350 packages Californian was withdrawn. Market privately is firm.

IPECACUANHA.—Lower. Most of the Rio offered was rather thin and wiry, but of good quality, and sold at 11s. 6d. to 11s. 9d. per lb., similar prices being obtained for short-pickled, while stout and stemmy root fetched 11s. 3d. For dusty Cartagena 7s. 5d. per lb. was bid and refused, 7s. 6d. being wanted. For the principal offerings of Cartagena the broker said he was "open for a bid," but none was made publicly. A few bales were afterwards sold privately at 7s. 9d. per lb.

JALAP.—Weak. Poor, small tuber sold at 4½d. per lb.; and another bolder lot without reserve.

KINO.—Large stocks have arrived lately, and supplies are excessive.

KOLA-NUTS.—Small African quarters sold at 1½d. per lb. for poor West Indian 2½d. was refused; and 5d. was the limit for washed.

LIQUORICE-ROOT.—A lot of decorticated and cut Spanish, damaged, sold at 32s. per cwt.

MANNA.—Three cases of dark stuff sold at 1s. 0½d. per lb.

MENTHOL.—Lower again. Importers' quotation is 6s. 9d. per lb., c.i.f. The spot holders require 7s. 3d., and report small sales at this figure.

Our Yokohama correspondent, writing on February 10, states that the demand on that market for export is very poor, and the

stocks are rather heavy. The present stock in Yokohama and in the interior is estimated at about 120,000 catties. [This we take to refer to oil and menthol, not menthol alone.—Ed.] Stock being so heavy holders are eager to realise, and for even 2,000 or 3,000 catties order they compete amongst themselves to sell. In these circumstances the price has naturally gone down, and now holders quote 430 yen per picul for refined recrystallised and 385 yen for common quality. Oil of peppermint is 188 yen per picul.

**MUSK.**—Skin trimmings of the pods sold at 3½d. to 4d. per oz., subject. Some business has also been done privately, and prices are higher, 80s. to 85s. being wanted for fine thin skin Tonkin blue pod. For old-fashioned Pile I. 43s. was refused, and 22s. for Pile III.

**NUX VOMICA.**—As previously reported fine quality has been scarce and much wanted for some weeks.

**OIL, ANISE STAR.**—There are sellers on the spot at 5s. 9d. to 5s. 10d. per lb.

**OIL, CITRONELLA.**—Business has been done privately at 11½d. per lb. (in drums), c.i.f. The exports from Ceylon from January 1 to February 21 were 114,141 lbs.

**OIL, LEMONGRASS.**—Unchanged, at 2½d. per oz.

**OIL, LIMES.**—Recent supplies are reported to have all been bought up, and higher prices are now asked.

**OIL, PEPPERMINT.**—Japanese 40-per-cent. oil is quoted at 5s. 1½d. per lb., c.i.f., and 4s. 10½d. to 5s. per lb. on the spot. Dementholised oil is 2s. 9d., c.i.f., and nothing is offered on the spot. Oil containing 60 to 65 per cent. crystals is offered at 5s. 4½d. American HGH is unchanged at 5s. per lb., c.i.f., and "Wayne County" 3s. 3d. per lb.

**OIL, PIMENTO.**—Good bright West Indian distilled oil sold at 7s. per lb.

**OIL, ROSE (BOMBAY).**—Good quality is scarce, and wanted at 5½d. per oz.; other kinds are neglected.

**OIL, SASSAFRAS.**—The parcel offered in auction was partly sold privately; the remaining case offered was limited at 1s. 6d. per lb.

**OIL, WINTERGREEN.**—Good brands are obtainable at 5s. 9d. per lb., c.i.f., or 6s. spot. D. & O. brand sold at 4s. 6d. per lb.

**ORANGE-PEEL.**—Good medium Maltese strip sold at 6d. to 7d. per lb.

**ORESIS.**—Prices are about 1s. 5d. to 2s. lower this week, and picked Florentine can be had at 32s. 6d. per cwt., and sorts at 28s. 6d., c.i.f.

RHUBARB met with the usual poor demand, the following comprising the sales:—Canton: Good bold flat, three-quarter pinky, one-quarter dark, 1s. to 1s. 1d. per lb.; ditto round, good fracture, 1s. 6d.; medium ditto, 11d.; bold round, half pinky, half grey, was limited at 1s. 1d.; medium ditto at 1s. per lb.; round bold druggists' trimming root sold at 2s. 6d.; and for mixed sizes, stemmy, round, 8d. per lb. was paid; round and flat pickings realised 9½d. to 10d. per lb. Shensi: Very little was sold; bold dull round, three-quarter grey, one-quarter dark, was limited at 1s.; bold light, dull coat, fair fracture, round, sold at 1s. 7d.; and good pickings fetched 1s. 2d. per lb. High-dried: Good medium round, fair fracture, brought 5d. to 6d.; bold, dull-coated, flat and round, 6½d.; good bold flat, three-quarter grey, one-fourth dark fracture, 10½d.; and poor and wormy pickings, 3½d. per lb.

**SARSAPARILLA.**—Good Honduras sold at 1s. 5d. per lb., subject. Jamaica dearer, good grey selling at 1s. 6d. to 1s. 8d., all being ranked as damaged; chumpy grey and rough sold at 10½d. to 1s. 5d. Lima-Jamaica sold at 1s. 1d. for 1 c.c.d., and Guayaquil at 1s. 2d. Five bales of Guatemala—a good fibrous root—were bought in at 1s. per lb. Mexican is scarce at 5½d. per lb., c.i.f., and Honduras is offered 1s. 5d. to 1s. 6d. on the spot.

**SENNA.**—There has been a fair private business in Alexandrian leaf at from 3½d. to 3½d. per lb. for fair broken leaf, and 1½d. to 2d. per lb. for sorts. The parcels offered in auction were held for higher figures than buyers were prepared to pay, consequently little business was transacted in auction. The following rates were paid:—Good bold green Tinnevelly leaf, 6d.; some lots were limited at 6½d.;

medium ditto, 3½d. to 3½d.; small to medium brown and yellowish, 2½d. to 2½d.; and brown and damaged, 1½d. to 1½d. per lb.; Alexandrian sold at 3d. to 4d. for ordinary poor mixed and brown leaf, and pods at 4d. per lb. Mecca did not sell. Seventy-two bales of Tinnevelly are expected by the *Peninsula* on March 19.

**STROPHANTHUS.**—Green Kombé seed is offered at dearer rates—viz., 3s. per lb., and brown at 10d.

**TAMARINDS.**—Black pasty East Indian sold at 17s. per cwt., a high figure, but justified by the short supply.

**TONKA-BEANS.**—Ordinary foxy Para beans have changed hands at 6d. per lb. in Liverpool. In auction poor foxy Paras sold at 5d.—a low figure. Frosty Angostura beans are held for 3s. per lb.

**TURMERIC.**—Madras on the spot is scarce, and good bright finger has been sold at 42s. 6d. per cwt., but less to arrive; split bulbs are steady at 11s. to 12s. per cwt.

**VANILLA.**—Only oddments were offered, and the business done was unimportant. Tahiti, good chocolate, realised 10s. 6d. per lb. for 4 to 6 inch, and 4½ to 6½ inch. Seychelles, good 7½ inch, 22s.; and mixed lengths, 16s. 6d. per lb.

**WAHOO-BARK.**—A parcel of chippy stuff catalogued as above sold at 5½d. per lb.

**WAX (BEES').**—The firm tone continues, recent heavy purchases in this market for continental account having left stocks rather low, and holders firm. Mogador wax especially scarce. The following were the sales in auction:—Californian, fair colour, 7l. per cwt.; Jamaica, 7l. 7s. 6d. to 7l. 10s. for good hard fair coloured, fair sorts, 7l. 5s.; pale West Indian, 7l. 5s.; Zanzibar, 6l. 17s. 6d. for good bright, 6l. 7s. 6d. to 6l. 12s. 6d. mixed colour, 6l. to 6l. 5s. for earthy and wormy; for good yellow bleached East Indian 5l. 7s. 6d. was bid and refused, 5l. 10s. being required. Genuine Italian is quoted 114s., c.i.f.

## Coming Events.

Wednesday, March 22.

*Midland Chemists' Assistants' Association*, Birmingham. Mr. Spilsbury will give some notes on practical pharmacy. *Plymouth, Devonport, Stonehouse, and District Chemists' Association*, Technical Schools, Plymouth, at 7.30. Lecture by Mr. F. R. Talbot on "Electricity." *Edinburgh Chemists', Assistants', and Apprentices' Association*, 36 York Place, Edinburgh, at 9.15. "Extracts," by Mr. R. G. Guyer.

*Newcastle-on-Tyne Chemists' Association*, at 8 P.M. Annual dinner at the Hôtel Métropole, Newcastle. Tickets, 4s. each, are obtainable from Mr. F. Gilderdale (Hon. Secretary), 19 Groat Market, Newcastle.

Thursday, March 23.

*Chemists' Assistants' Association*. Cinderella at the Portman Rooms. Tickets can be obtained from Mr. C. Morley, 3 Bucklersbury, E.C., or Mr. H. H. Robins, 113 Ridley Road, Forest Gate.

*Midland Pharmaceutical Association*, Birmingham. Discussion on trade-subjects.

*Liverpool Chemists' Association*, Royal Institution, Liverpool, at 7 P.M. "A Note on Tinct. Aurantii," by Mr. Harold Wyatt; "Latin in Pharmacy," by A. Séree (translated by Mr. Wyatt); "The Determination of the Alkaloids in Belladonna-root," by Mr. E. Dowzard.

Friday, March 24.

*Royal Institution of Great Britain*, Albemarle Street, Piccadilly, W., at 9 P.M. Lord Rayleigh will discourse on "Transparency and Opacity."

*Aberdeen Junior Chemists' Association*, at 9.30. General meeting.

## An Advertisers' Exhibition

is being organised by Mr. S. H. Benson, one of the best-known London advertising experts. It will be opened at the Niagara Hall, Westminster, on April 22 next, and it is intended to collect all kinds of mediums and devices for attracting public attention. The leading advertisers of the United Kingdom and the principal newspaper proprietors are supporting the exhibition, while Mr. Phil May and Mr. Dudley Hardy are on the Art Committee. The exhibition will remain open until May 6.

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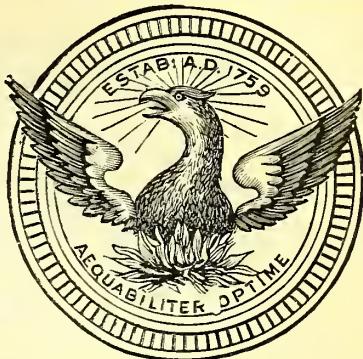
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5, 10, and 15 % CARBOLIC  
Antiseptic and Deodorising  
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Bags and Casks free.

AGENTS WANTED  
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FOR STONE, PORCELAIN,  
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## REDUCE THE PRICE

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We now offer either our "D. C. L." Malt Extract or "D. C. L." Malt Extract and Cod Liver Oil in 8-oz., 16-oz., and 52-oz. bottles (fluid capacity) at 1s., 1s. 9d., and 4s. 6d. each respectively. Prices to chemists 9s. 6d., 16s. 6d., and 43s. 6d. per dozen, net. Carriage paid on 3 dozen lots. Supplies can be had from Chemists' usual Drug or Sundry House.

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PARTLY OXYDIZED HYDRO-CARBONS!  
ASEPTIC, LIQUID, SOLUBLE IN WATER!  
HOLDS MEDICAMENTS IN CLEAR SOLUTION!  
RAPID ABSORPTION PROVED BY URINE ANALYSES!

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Produces no irritation.

Does not discolour the skin, and is more efficacious than Tincture of Iodine.

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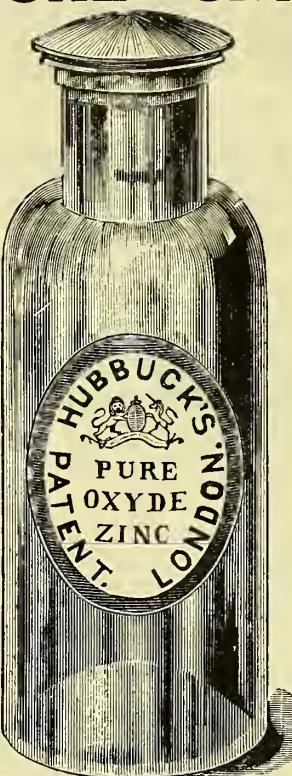
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Manufacturers of  
White Lead, White Zinc,  
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The Manufacturers supply their Pure Oxide Wholesale only, in quantities of not less than 2 cwt.

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## PRICE LIST.

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|--------------------------------------------|-----------------------|------------------------------------------|-------------|-----------------------|
| 1/6 Essence, $\frac{1}{2}$ oz. ... ... ... | 15/- doz. } less 10 % | 1/1 $\frac{1}{2}$ Ointment ... ... ...   | ... ... ... | 11/- doz. } less 10 % |
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| 2 oz. do. ... ... ...                      | 3/- each              | 8 oz. do. ... ... ...                    | ... ... ... | 5/6 each, less 5 %    |
| 4 oz. do. ... ... ...                      | 6/- " }               | 1/6 Soap ... ... ...                     | ... ... ... | 15/- doz.             |
| 6 oz. do. ... ... ...                      | 9/- " }               | 1/- do. ... ... ...                      | ... ... ... | 9/- "                 |
| 1/- Extract ... ... ...                    | 9/- doz.              | 1/6 Dry Inhalers ...                     | ... ... ... | 14/- "                |
| 1/1 Jujubes (Coated) ... ... ...           | 11/6 "                | 10/6 Steam Inhalers ...                  | ... ... ... | 120/- "               |
| 2/3 do. do. ... ...                        | 22/- " }              | 2/- Wool Packet ...                      | ... ... ... | 18/- "                |
| 1/1 do. (Plain) ... ... ...                | 11/6 "                | Wound Pads ...                           | ... ... ... | 1/6 "                 |
| 2/3 do. do. ... ...                        | 22/- " }              | 1/1 $\frac{1}{2}$ Plasters (in Tins) ... | ... ... ... | 10/- "                |
| 1/9 Liniment ... ... ...                   | 20/- "                | 1/1 $\frac{1}{2}$ Zalones ...            | ... ... ... | 12/6 "                |

"Your 'Pumiline' preparations act like **MAGIC** in cases of Chronic Bronchitis and Laryngeal Catarrh."—Sir MORELL MACKENZIE.

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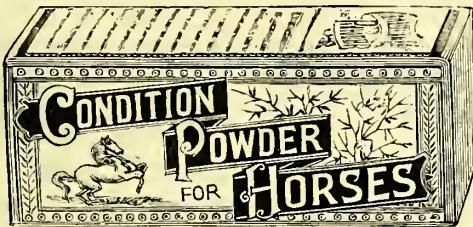
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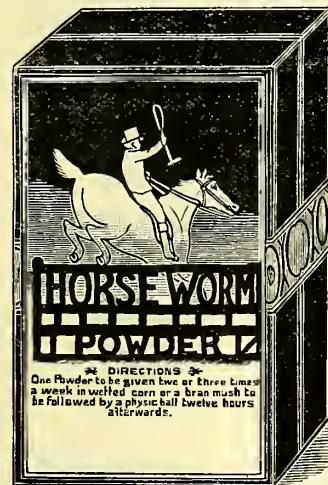
## CONDITION POWDERS for HORSES.



**Style.**—Put up in neat, tightly-packed blue Cardboard Cases.

### Prices.

$\frac{1}{4}$  lb., 4d. retail, 2/6 per doz. |  $\frac{1}{2}$  lb., 6d. retail, 4/- per doz.  
1 lb., 1/- retail, 7/6 per doz.



## HORSE WORM POWDERS.

**Style.**—6 Powders in Cardboard Box, with well-designed Label in white and blue.

### Price

1/- size ... 7/- doz.;  
6 doz. 6/6; 12 doz. 6/-

## FOOT ROT PASTE.

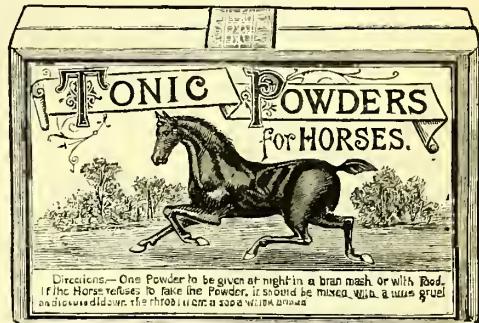


**Style.**—In strong, squat, amber Bottles, with Label in red and white.

### Prices

|           | Doz. | 6 Doz. | 12 Doz. |
|-----------|------|--------|---------|
| 6d. size, | 3/9  | 3/6    | 3/3     |
| 1/- size, | 7/-  | 6/6    | 6/-     |

## ALTERATIVE POWDERS: TONIC POWDERS FOR HORSES.



**Style.**—In boxes, each containing 6 powders; one for a dose.  
**Price** per doz. boxes, 5/6 per doz.; 6 doz. 5/-; 12 doz. 4/6.

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**Style.**—In Cardboard Boxes, holding 6 Powders, with Label in black and white.

**Price**—5/6 doz.; 6 doz. 5/-; 12 doz. 4/6.

## FLY & MAGGOT OIL.

For SCAB, MANGE, TIC, &c., in  
Sheep and Cattle.



**Style.**—In Wine Bottles (6 to gallon) with effective Labels in black and white.

### Prices

| Doz. | 6 Doz. | 12 Doz.  |
|------|--------|----------|
| 7/6  | 7/3    | 7/- doz. |

Also in 10-oz. Blue Fluted Oval's.

| Doz. | 6 Doz. | 12 Doz.  |
|------|--------|----------|
| 3/9  | 3/6    | 3/3 doz. |

**EVANS, LESCHER & WEBB,** 60  
BARTHOLOMEW CLOSE, LONDON

THE REMEDY OF THE AGE.  
**POST'S "C.B.O."**

The only remedy in the world that does or can produce a certificate of analysis proving it to be absolutely free from such specific poisons as Colchicum, Calomel, or Mercury, and the most effective cure yet discovered for

**GOUT & RHEUMATISM.**

Particulars and Testimonials free on application.

In Tasteless Tablets; Retail Price, 2/9 & 4/6 per Bottle.

**POST'S LIVER PILLS.**

For Torpid Liver, Constipation, &c. Retail Price, 13*½*d. per box.

SPECIAL TERMS FOR WHOLESALE ORDERS.

**A. M. POST, LIM., 96 AND 98 LEADENHALL STREET, LONDON, E.C.**

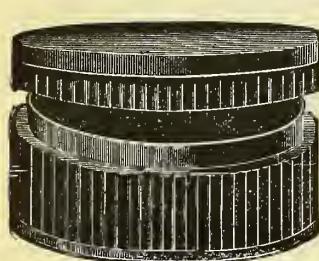
**POST'S LINIMENT, No. 1.**

Gives speedy relief in cases of Inflammatory Rheumatism or Gout where the joints are swollen, inflamed, and painful to the touch.

**POST'S LINIMENT, No. 2.**

Will be found wonderfully efficacious for lame back, stiffness in the joints, contraction of the cords, &c.

Retail Price, 4/6 each per bottle.



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MANUFACTURE THE FOLLOWING SPECIALITIES—

“STIPENDUM” CORK STOPPERS, in all sizes.

“STIPENDUM” CORK-LINED CAPS, for Pomade Bottles.

“STIPENDUM” OPENERS, for Stoppered Aerated-water Bottles.

**“STIPENDUM” GREASE-PROOF COVERED POTS,**

*IN TERRA COTTA, CHOCOLATE, AND BLACK.*

The Grease-Proof Covered Pots have perfectly-fitting lids, are practically unbreakable, and the only articles really answering the purpose intended.  
 To be had of all Druggists' Sundriesmen.

Wholesale only of the Company

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ESTABLISHED  
1839  
ESTABLISHED

ROUND, OVAL, SQUARE, or FOLDING, for the  
**DRUG, DRYSALTERY, AND CONFECTIONERY TRADES.**

LABELS, WHEN PRINTED TO OUR INSTRUCTIONS, WE PUT ON PILL  
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**BOXES AND CASES FOR**

Baking Powder, Black Lead, Bottles, Camphor Ball, Capsules, Castor Oil, Cough Lozenges, Dispensing Powder, Eye Ointment, Fancy Boxes, Fuller's Earth, Folding Boxes, Glass Top Outers, Homœopathic Bottles, Insect Powders, Ink Cases, Jewellery, Lozenge, Lip Salve, Magnesia, Metal Paste, Marking Ink, Nipple Shields, Night Lights, Parcel Post, Pastilles, Pills, Potash Tablets, Plasters, Salt Lemon, Seidlitz Powder, Starch Gloss, Soaps, Soda Powder, Syringes, Tapers, Tooth Powder, Violet Powder, &c.

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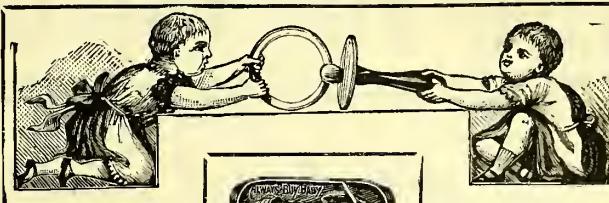
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THE "NURSE MARGERY."

Prov. Pat. 127439.

## Teatfast & Shieldfast

Can be applied to ANY Pattern, not necessarily only Ring Soothers.



Simplicity itself.

Without any obstruction in the Teat.

All fitted with Cords, being part of the Patent.

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|------|------------------------------------------|------------|
| L1   | 1d. Olive Wood, Pear-shape Polished Teat | 7/6 gross. |
| L1s  | 1d. " " " Seamless Teat                  | 8/-        |
| L2   | 2d. Ring, Seamless Teat ..               | 1/2 doz.   |
| L27  | 2d. Flat Bone, Seamless Teat ..          | 1/3 "      |
| L39  | 2d. Long, with 2nd size Teat ..          | 1/4 "      |
| L103 | 2d. Long, Fancy 2nd size Teat ..         | 1/4 "      |
| L23  | 6d. Rubber Ring, Pad and Teat ..         | 3/6 "      |



No more Children Choked by Teats and Shields coming apart.

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|-----|-----------------------------------|-----------|
| L3  | 3d. Solid Ring, Seamless Teat ..  | 1/10 doz. |
| L17 | 3d. Rubber Ring, Seamless Teat .. | 2/- "     |
| L37 | 3d. Rubber Small ..               | 1/6 "     |
| L36 | 3d. Rubber Ring and Pad ..        | 2/- "     |
| L4  | 4d. Solid Ring ..                 | 2/8 "     |
| L33 | 4½d. or 6d. Large Rubber Ring ..  | 3/- "     |

PLEASE REMEMBER! THE "TEATFAST" LOCK IS APPLIED TO ANY PATTERN, & HAS NO OBSTRUCTION IN THE TEAT.

**Extract from "Chemist and Druggist," Feb. 4th, 1899:**—A TEATFAST SOOTHER.—Messrs. Shirley Brothers, Whitecross Works, Newington Causeway, S.E., send us samples of a new idea which they have patented for securing the Teats on Babies' Soothers. It is a simple idea, the cord which is put round the infant's neck being placed within the teat. This secures the teat in a remarkable way, one person pulling at the cord and another at the teat being unable to pull the latter off. If by some miraculous accident the infant should manage to suck the teat down its throat, the cord is bound to go with it, so that choking would even in that extreme case be prevented by pulling the cord."

|                              |              |             |                        |             |           |                                     |        |             |
|------------------------------|--------------|-------------|------------------------|-------------|-----------|-------------------------------------|--------|-------------|
| <b>TINS</b>                  | Whatever you | <b>TINS</b> | Don't forget           | <b>TINS</b> | is THE    | <b>TINS</b>                         | all    | <b>TINS</b> |
| <b>TINS</b>                  | want in      | <b>TINS</b> | SHIRLEY BROS.          | <b>TINS</b> | HOUSE for | <b>TINS</b>                         | kinds. | <b>TINS</b> |
| <b>TINS</b> Plain.           |              |             | <b>TINS</b> Decorated. |             |           | <b>TINS</b> quoted for in quantity. |        |             |
| Please write for quotations. |              |             |                        |             |           |                                     |        |             |

**SHIRLEY BROTHERS, Whitecross Works, Rockingham Street, S.E.**

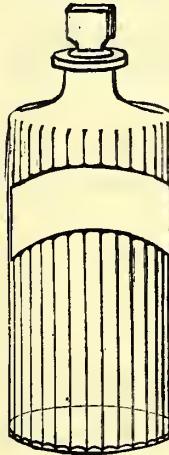
# TOOGOOD'S WHITE GLASS POISON SHOP ROUNDS

(Conforming to the Poison Regulations).



Extract from Regulations—

**b.** Poisons to be kept in a bottle or vessel, **distinguishable by touch** from the bottle or vessel in which ordinary articles are kept in the same warehouse, shop, or dispensary.



### SIZES:—

|                          | 8  | 16 | 20 | 32 | 40  | 48  | oz. |
|--------------------------|----|----|----|----|-----|-----|-----|
| Height to Shoulder       | 4  | 5  | 5½ | 6½ | 7   | 7½  | in. |
| Height to top of Stopper | 5½ | 7½ | 7½ | 9  | 10½ | 10½ | in. |

N.M. 8 - 11/- 12/- 15/- 16/- 18/- doz.

W.M. 9/- 12/- 13/- 16/- 17/- 19/- ..

LABELLING IN GOLD, 3/6 doz.

**WILLIAM TOOGOOD,**

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# PROTECTION FOR THE CHEMIST.

Each and every box of **JOHNSON & JOHNSON'S** Belladonna Plaster, whether in 1-yard or 5-yard rolls, the regular porous back or breast Plasters, will contain a distinct guarantee over **JOHNSON & JOHNSON'S** Signature that the Plaster in the box specified conforms to the requirements of the B.P. 1898.

In addition to this, in each and every box will be placed a slip showing the actual analysis of the Plaster or Plasters the box contains.

This assures the safety of Chemists purchasing **JOHNSON & JOHNSON'S** Belladonna Plasters.

**NO CHANGE IN PRICES.**

CAN BE OBTAINED FROM ALL WHOLESALERS, OR  
DIRECT FROM

**JOHN TIMPSON & CO.,**

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*Look at the opposite page.*

# BELLADONNA PLASTERS AT A GLANCE.

Imperial.

|                              |     |           |             |          |
|------------------------------|-----|-----------|-------------|----------|
| Liquid Extract of Belladonna | ... | 4 fl. oz. | ...         | 100 c.c. |
| Resin Plaster                | ... | ...       | 5 oz.       | ...      |
|                              |     |           | 125 grammes |          |

## CONSTITUENTS OF BELLADONNA . . .

Atropine.

Hyoscyamine.

Chrysotropic Acid.

Leaxotropic Acid.

succinic Acid.

Acetic Acid.

Pseudotaurine.

Phyteneumscilla.

Guin, Wax, Mucilage,

Asparagin, Albinin.

Atrosin.

Chlorophyll.

Potassium Salts.

Magnesium Malate and

Phosphate.

Calcium Malate and

Oxalate.

Sodium Phosphate.

Ammonium Salts.

Evaporate the liquid extract of belladonna on a water bath until it is reduced in weight to one ounce (or 25 grammes); add the resin plaster previously melted. Mix.

This plaster contains 0·5 per cent. of the alkaloids of BELLADONNA ROOT.

*Johnson's Belladonna Plaster conforms strictly to the B.P. 1898 in strength and kind of drug used.*

## BELLADONNA PLASTER.—JOHNSON & JOHNSON'S FORMULA.

Belladonna gathered in proper time and season extracted with alcoholic menstruum so as to retain all soluble constituents of the drug by macro-percolation, reduced in vacuo to a semi-solid extract. Incorporated by mixing cold with plaster mass.

## JOHNSON'S BELLADONNA PLASTER CONTAINS ALL THE SOLUBLE CONSTITUENTS OF BELLADONNA IN ABSORBABLE FORM.

*The essential feature of Johnson & Johnson's Belladonna Plaster is the use of an absorption promoting base that frees the pores from fatty matter, thus insuring reliable and increased action of the drug.*

Each and every box of Johnson & Johnson's Belladonna Plasters contain a warranty over their signature that the plasters contained in the box conform to the requirements of the B.P. 1898.

Also each and every box contains a statement showing the analysis of the plasters in that identical box.

28 Victoria Street, Westminster.  
Messrs. JOHN TIMPSON & Co.

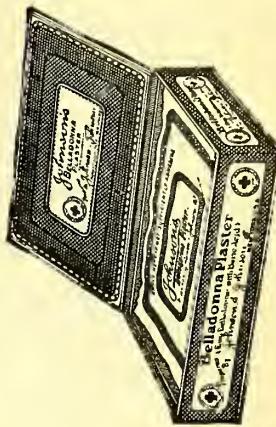
DEAR SIRS,—

I have made a careful examination of Johnson & Johnson's Belladonna Plasters.

The result of three careful extractions of the plaster mass titrated with Mayer's reagent, and using Dragendorff's reagent, gives 0·0414 for Belladonna alkaloids is 0·489 %.

I hereby certify that 0·489 of Alkaloids were present in Johnson & Johnson's Belladonna Plasters. I have further identified the alkaloid as Atropine, and proved the absence of Hyoscyamine and Scopolia Extract.

Yours faithfully,  
SAMUEL RIDEAL, D.Sc.Lond, F.I.C.



## DISPENSING BOTTLES.

### THE NORTH LONDON GLASS BOTTLE COMPANY

(I. ISAACS & CO., Proprietors)

Beg to inform the Trade that they have made a further reduction in the price of their Bottles, as follows:—  
The NEW SHAPE FLAT BOTTLES, with rounded edges, plain or graduated—

|                                                     |                |                |                 |
|-----------------------------------------------------|----------------|----------------|-----------------|
| 3 & 4 oz. ..                                        | 7/6 per gross. | 10 & 12 oz. .. | 12/- per gross. |
| 6, 8 ..                                             | 8/6 ..         | 16 ..          | 16/- ..         |
| WHITE MOULDED PHIALS, plain or graduated Teaspoons— |                |                |                 |
| 1 oz. ..                                            | 3/6 per gross. | 1 1/2 oz. ..   | 4/6 per gross.  |
| 1 ..                                                | 3/9 ..         | 2 ..           | 5/- ..          |

#### PLEASE NOTE.

Six gross and upwards, assorted or otherwise, are carriage paid to any address in England; smaller quantities not carriage paid.

I. ISAACS & CO., Glass Bottle Manufacturers,  
106 MIDLAND ROAD ST. PANCRAS, LONDON.

Established 50 years. Bankers—London and Westminster Bank.

## VINCENT WOOD'S

LATEST SPECIALTIES—

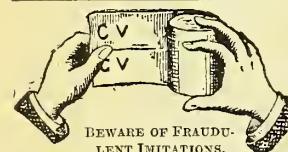
### THE "EUREKA" HERNO TRUSSES.

The Pad is made of a Patented Elastic Composition, which is not affected by heat or cold, and the wear very luxurious.

Prices per doz. A B C      A B C      quality.

Single .. 18/- 27/- 30/-      Double .. 27/- 42/- 45/-

SEND FOR MY PRICE LIST.



Another great Surgical Invention is  
THE EUREKA "CREPE  
VELPEAU" RUBBERLESS  
POROUS BANDAGES.

They will supersede every other in the near future.

In Bandages 2 1/2 & 3 in. in width.  
12/- 15/- 18/- per doz.

Maker on the Premises of ELASTIC STOCKINGS, TRUSSES, BELTS,  
SUSPENSORY BANDAGES, CHEST PROTECTORS, &c.

4 ALBION PLACE, BLACKFRIARS BRIDGE, LONDON, S.E.

## DR. MARTIN'S PURE RUBBER BANDAGES.

For

Varicose

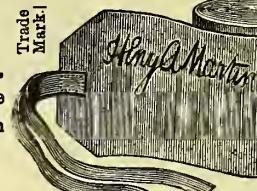
Veins, Ulcers,

Eczema of the

Leg, Swollen

and Weak

Joints.



CAUTION.—Please order *Genitve* Martin's Bandages, each being stamped with Dr. Martin's signature. All others are *Spirious* Imitations.

Complete Price List  
Trade Discount, and  
Dr. Martin's  
Pamphlet post free.

| No. | PRICES.                                       | Feet   | Inches | Each |
|-----|-----------------------------------------------|--------|--------|------|
| 3A  | Thin, for ankle, elbow, wrist, and forearm .. | 6      | 2 1/2  | 3/6  |
| 3.  | Thick ..                                      | 6      | 2 1/2  | 4/-  |
| 1B. | Thin, for leg below knee ..                   | 10 1/2 | 3      | 5/6  |
| 1A. | Thick ..                                      | 10 1/2 | 3      | 7/6  |
| 8.  | Thin, for leg and knee ..                     | 14     | 3      | 7/6  |
| 7.  | Thick ..                                      | 14     | 3      | 9/6  |
| 9B. | Thin, for leg and thigh ..                    | 21     | 3      | 10/6 |
| 9A. | Thick ..                                      | 21     | 3      | 13/6 |

Sole Agents—KROHNE & SEEMANN, SURGICAL INSTRUMENT MAKERS.

8 DUKE STREET, MANCHESTER SQUARE, LONDON.

**& CO.  
J. ROBBINS**

**METHYLENE.**  
Obtained by the action of Metallic Zinc on Chloroform and Alcohol  
Discovered to be a general Anaesthetic by Sir BENJAMIN W. RICHARDSON in 1867.

1-lb. Stoppered Bottle, 12s; 1/2-lb., 6s. 6d.; 4-oz., 3s. 6d.; 2-oz., 2s.

**COMPOUND ANAESTHETIC ETHER.**  
For producing Local Anaesthesia.  
In 4-oz., 10-oz., and 20-oz. Stoppered Bottles, 2s., 4s., and 7s.

**OXONIC ETHER,**  
In 2-oz., 4-oz., 8-oz., and 16-oz. Stoppered Bottles, 2s., 3s. 6d., 7s., and 12s.

**PEROXIDE OF HYDROGEN,**  
First introduced as a Medicine by Sir BENJAMIN W. RICHARDSON.

**ETHYLATE OF SODIUM**  
(Sir BENJAMIN W. RICHARDSON'S Formula), for removing Naevi, &c.  
In 4-oz. and 1-oz. Bottles, with elongated Stoppers for applying the Caustic, 2s. 6d. and 4s.

**STYPTIC COLLOID,**  
For promoting the Healing of Wounds by the first intention. In 2-oz. and 4-oz. Bottles, with Brush, 2s. 6d. and 4s. 6d.; 16-oz., 12s.

**CHARCOAL CAPSULES,**  
Containing Pure Vegetable Ivory Charcoal. In Boxes, 2s. 6d. each.

**J. ROBBINS & CO.**

189 WARDOUR ST.  
OXFORD ST.  
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189 WARDOUR ST.  
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REGISTERED  
TRADE MARK

# VIMULE

## SOLUBLE TABLETS

PREVIOUSLY ADVERTISED AS

REGISTERED  
TRADE MARK

### LAMBERT'S SOLUBLE QUININE TABLETS.

PERFECTLY  
PREPARED.



ABSOLUTELY  
RELIABLE.  
SALE UPWARDS OF  
8,000,000.

These Tablets are manufactured by us of the best materials procurable. We guarantee every one to be of accurate proportions, and can with confidence recommend them to the trade as one of the best ever introduced.

They are packed in specially neat metal boxes of 1 doz., and sealed with our Registered Label, without which they are not genuine.

Our method of packing particularly adapts them for exportation. Being practically air-tight they will keep in perfect condition for a long period, and liability to injury by variation of climate is reduced to a minimum.

Advertised to retail at 2/- per box of 1 dozen. 5/- for three boxes. 9/6 for six boxes. 17/- for 12 boxes.

#### Trade Price.

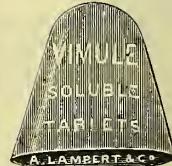
12/6 net per dozen boxes of 1 dozen each.

Single boxes 1/3, including postage.

Orders of 1/2 doz. boxes and upwards sent post free.

Can be obtained through any wholesale house.

PERFECTLY  
PREPARED.

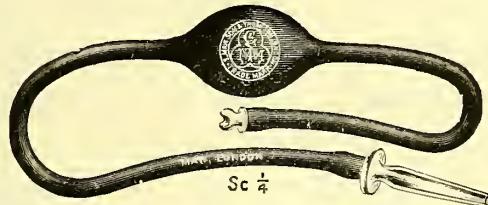


TRADE PRICES  
MODERATE.  
SALE UPWARDS OF  
8,000,000.

**A. LAMBERT & CO.,** 16 DALSTON LANE, **LONDON, N.E.**

# MAW'S

SEAMLESS



**S. MAW, SON & THOMPSON,**  
7-12 Aldersgate Street, LONDON.

## ANTISEPTIC DRESSINGS, &c.

|                                      | Percentage          | In Paper<br>Parcels | In Boxes |    | In Sealed<br>Tins |    |
|--------------------------------------|---------------------|---------------------|----------|----|-------------------|----|
|                                      |                     |                     | s.       | d. | s.                | d. |
| <b>GAUZES</b> (36 in. wide)—Boric    | ... per dozen yards | 25                  | 1        | 9  | 2                 | 0  |
| Carbolized, unbleached               | ...                 | 5                   | 1        | 8  | 1                 | 11 |
| Iodoform                             | ...                 | 10                  | 4        | 0  | 4                 | 3  |
| Iodoform                             | ...                 | 5                   | 4        | 0  | 4                 | 3  |
| Lister's Cyanide of Mercury and Zinc | ...                 | 3                   | 3        | 2  | 3                 | 5  |
| Sal Alembroth                        | ...                 | 1                   | 1        | 9  | 2                 | 0  |
| Salicylic                            | ...                 | 4                   | 2        | 4  | 2                 | 7  |
| Sublimate, Unbleached                | ...                 | 4                   | 1        | 6  | 1                 | 9  |
| <b>LINTS</b> —Boric...               | ... per lb.         | 45                  | 1        | 6  | 1                 | 9  |
| Carbolized                           | ...                 | 5                   | 2        | 0  | 2                 | 3  |
| Cyanide of Mercury and Zinc          | ...                 | 3                   | 3        | 4  | 3                 | 7  |
| Iodoform                             | ...                 | 10                  | 5        | 0  | 5                 | 3  |
| Sal Alembroth                        | ...                 | 2                   | 2        | 1  | 2                 | 4  |
| Salicylic                            | ...                 | 4                   | 2        | 4  | 2                 | 7  |
| Sublimate                            | ...                 | 4                   | 2        | 0  | 2                 | 3  |
| <b>WOOLS</b> —Boric                  | ...                 | 45                  | 1        | 4  | 1                 | 7  |
| Carbolized                           | ...                 | 5                   | 1        | 6  | 1                 | 9  |
| Cyanide of Mercury and Zinc          | ...                 | 3                   | 2        | 8  | 2                 | 11 |
| Iodoform                             | ...                 | 10                  | 4        | 6  | 4                 | 9  |
| Sal Alembroth                        | ...                 | 2                   | 1        | 6  | 1                 | 9  |
| Salicylic                            | ...                 | 4                   | 1        | 9  | 2                 | 0  |
| Sublimate                            | ...                 | 4                   | 1        | 4  | 1                 | 7  |

**S. MAW, SON & THOMPSON, 7 to 12 Aldersgate Street, LONDON.**

Telegraphic Address:  
"SOOTHERS BIRMINGHAM."

E. W.  
B.

Trade Mark.

No connection with any other  
firm of the same name.

# DRUGGISTS' SUNDRIES

## OF EVERY DESCRIPTION.

Being a Cash Buyer and Manufacturer of the Leading Lines in above, lay myself out to do business and to overcome competition.

QUALITY OF GOODS GUARANTEED.

WRITE FOR PRICE LIST, WHICH WILL BE  
FORWARDED FREE ON APPLICATION,

**EDWARD WOOLF**

Manufacturer of Druggists' Sundries,

**ST. GEORGE'S CRESCENT, BIRMINGHAM.**

## LISTER'S ANTISEPTIC DRESSINGS

(ISDAMA

BRAND).

See that the Red Cross is  
on every package.

TRADE SDAMA MARK.

Be sure to specify  
MILNE'S LISTER'S.

Prepared according to Lord Lister's personal instructions.

MILNE'S ABSORBENT  
WOOL, LINT, TISSUE,  
BANDAGES.

LISTER'S  
DOUBLE CYANIDE  
GAUZE.

MILNE'S JACONET  
BED-SHEETINGS,  
OILED SILK.

PLEASE APPLY FOR JOHN MILNE'S ILLUSTRATED CATALOGUE.

**THE CALEN MANUFACTURING CO., LTD.,** Antiseptic Dressings Factory, LADYWELL, S.E.

## R. H. BARRETT'S PATENT CAPPED BOTTLE.

The only REALLY PERFECT Bottle for Vaseline, Boot Creams, Pomades, Dry Powders, &c.

### PRICES:



TALL SERIES, fitted with STRONG METAL CAPS, CORK-LINED, in various  
Colours, very attractive in appearance:—

1-oz. 11/6; 1½-oz. 12/-; 2-oz. 12/9; 3-oz. 15/9; 4-oz. 17/3 per gross, &c.  
Special Prices on application for Quantities.

CHEMISTS' AND PERFUMERS' BOTTLES IN GREAT VARIETY, PLAIN OR STOPPED.



**R. H. BARRETT,**

FLINT GLASS BOTTLE WORKS, THE OVAL, CAMBRIDGE HEATH, LONDON, E.

TELEGRAPHIC ADDRESS—"FOREFRONT LONDON."

# POISON BOTTLES.

We have had so many inquiries for our new registered Poison Bottles for stock purposes, mentioned in the *C. & D.* of last week, that we give illustration below.

We also supply **recess** ribbed Poison Bottles in either Actinic or Blue Glass; as we do these on the premises, we can promise quick delivery.

## BLUE CLASS.

|           |     |
|-----------|-----|
| 3 oz. ... | 7/- |
| 4 oz. ... | 7/6 |
| 6 oz. ... | 8/- |
| 8 oz. ... | 8/- |

**Other Side Ribbed.**



## BLUE CLASS.

|            |      |
|------------|------|
| 10 oz. ... | 8/6  |
| 12 oz. ... | 9/-  |
| 16 oz. ... | 9/6  |
| 20 oz. ... | 10/- |

**Other Side Ribbed.**

## RECESS.

|            |      |
|------------|------|
| 10 oz. ... | 20/6 |
| 20 oz. ... | 22/- |

**Complete with Label.**



## RECESS.

|            |      |
|------------|------|
| 30 oz. ... | 24/6 |
| 40 oz. ... | 27/- |

**Complete with Label.**

Prices are with Glass stoppers and complete with handsome Gold Label.

Prices include Recess Label complete, on either white, blue, green, pink, or buff ground.

## POISON CUPBOARDS OF EVERY DESCRIPTION.

We have a variety of Poison Cupboards in our new Showrooms which may be of interest to our friends at the present time.

# POWDER PUFFS.

Purchase of a Manufacturer's Stock below cost.

Our prices are as follows, subject to the various sizes being unsold when orders reach us.

| Nos. | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8        |
|------|-----|-----|-----|-----|-----|-----|-----|----------|
| 1/6  | 2/- | 2/3 | 3/- | 3/9 | 4/6 | 5/- | 6/- | per doz. |

These Prices are very considerably below the usual ones and cannot be repeated.

PACKED IN 1-DOZEN BOXES.

All of above are fitted with Ivory-top Knobs, and composed of the finest quality Swansdown, and are in every respect perfect goods.

ANY QUANTITY SENT CARRIAGE PAID ON RECEIPT OF POSTAL ORDER OR CHEQUE.



# AYRTON & SAUNDERS,

34 Hanover St.,

LIVERPOOL.

# CARDS.

FOR TERMS APPLY to the PUBLISHER.

**FRED. FINK & CO.**

10 & 11 MINCING LANE, LONDON, E.C.

SPECIALITIES : Glycerine — Gum Arabic —  
Gum Tragacanth — Pure Beeswax — Honey.

## TO DENTISTS.

High-class Dental Mechanism in Gold, Dental Alloy, Tubes, Gum Sections  
Vulcanite, Celluloid, or their Combinations, by

**A. J. FENTIMAN & CO., Dentists,**  
2 UPPER EAST SMITHFIELD, LONDON (Near Royal Mint and Mark Lane Stations), E.

In no way connected with any other address. MODERATE CHARGES.  
ESTABLISHED 1885. Telegraphic Address—"ULLINGLY LONDON."

THE WORLD'S LARGEST DEALER IN  
**PURE SPANISH CANARY SEED**  
AND  
**CUTTLEFISH BONE.**  
J. MACQUEEN, BROWN STREET, GLASGOW,  
AND PORT ST. MARY, SPAIN.

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With a reputation of over 50 years, is the only means of preserving  
uninterruptedly a keen edge to razors, absolutely without  
trouble. A leaf being used for wiping the razor upon after shaving, an  
exquisitely keen edge is thus, day by day, automatically secured.

Protected Prices. Continuous Sale wherever introduced.  
Packets, 6d. & 1s. Boxes, 3s. & 6s. Books, 1s., 1s. 6d., & 2s. 6d.

Sole Manufacturers—F. Barker & Son, Finsbury Park, London, N.

## CACHETS "FINOT"

(White or Coloured),

WITH INSCRIPTIONS IN ANY DESIRED  
TINT; ALSO PLAIN OR EMBOSSED.

"Beautifully made, and the inscriptions give them a distinction all their  
own."—C. & D. "Perfection of Cachets."—Lancet.  
These Cachets are especially adapted for Headache, Neuralgia, & other powders.

**COOPER & CO., 80 Gloucester Road, SOUTH KENSINGTON.**  
In Nine Sizes. Also made to fit existing machines.

## HIGH-CLASS MECHANICAL DENTISTRY

Lowest Prices, Superior Workmanship. Price Lists free.

**FRED. H. BARKER, DENTIST, CRIMSBY.**

Barker's Premier Amalgam. The Best Stopping.  
PRICE 10/- PER OZ.

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You can add largely to your profits, without outlay or risk, by taking up an  
AGENCY for our RUBBER STAMPS, TYPE, SEALS, STENCILS,  
MARKING INK, &c.

Full particulars, Transparency for Window, Specimen Sheets and Rubber  
Stamp complete, with your Name and Address, as sample, FREE.

**D. C. RICHFORD, 44 Snow Hill, LONDON**

There is more profit on Rubber Stamps than on any article a Chemist sells.

We guarantee our Pure Acid to be made directly  
and entirely from Phosphorus: Absolutely the  
best and purest on the market.

ANSWERS ALL THE REQUIRE-  
MENTS OF THE NEW & C.

**Phosphoric Acid**  
SAMPLES ON APPLICATION  
—WALTER VOSS & CO.  
Phosphoric Acid Manufacturers  
MILLWALL, LONDON, ENGLAND

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Cameras (1/4-plate), complete, 1/- to 21/-  
Send Trade Card for an Illustrated Catalogue of Photographic, Steam, and  
Electrical Novelties.

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See C. & D. Diary, page 108.

**SHEEP DIPS, FLUID AND PASTE  
DISINFECTANTS, FLUID AND  
POWDER.**

LOWEST PRICES IN BULK OR PACKED.

**J. BARRATT & CO., MIDDLETON, near MANCHESTER.**

E. H. THIELLAY'S (Registered 1867)

## EUCALYPTIA.

From "Eucalyptus Globulus," An antiseptic regener-  
ator of the hair, instantly stopping its falling off, and is  
invaluable for hairdressing; a safeguard in epidemic times,  
protectively surrounding the respiratory functions from  
malarious and vitiated emanations. In Bottles at

2/6, 3/6, 4/6, 7/-, 10/-, &c.

All Wholesale Houses, or direct from

**E. H. THIELLAY**

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(SHOW ROOMS AT CHARING CROSS HOTEL.)

**THE THORNTON-PICKARD**  
See our 2-paged Adv't.,  
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**CAMERAS & SHUTTERS**  
Illustrated Catalogue with full particulars, post free, from  
The Thornton-Pickard Manufacturing Co., Ltd., Altrinham.

## THE BENEDICTINE SALVE

(Made by the Benedictine Monks of Buckfast Abbey, Devon.)  
CURES CANCEROUS WOUNDS, BOILS, CARBUNCLES, TUMOURS, ULCERS,  
ABCESSSES, WHITLOW, SCROPHULOUS SORES, and other similar diseases.  
The ingredients and preparation of this salve are, and have been for centuries,  
a secret with the Benedictine Monks of France. Its healing properties have  
been effectually proved, and hundreds of testimonials might be given.

SPECIFIC ANTI-BILIOUS PILLS are also supplied.

The Salve and Pills are sold in boxes, 1s. 1d. each; post free for 1s. 2d. each;  
two boxes 2s. 4d., with full directions for use. Apply to the Rev. Procurator,  
Abbey, Buckfastleigh, Devon.

AGENTS WANTED,

**"SILVERY WHITE CUTTA PERCHA ENAMEL"**  
TOOTH STOPPING.

**P. A. STEVENS, Surgeon-Dentist**  
72 MANSFIELD ROAD, N.W.  
Sole Proprietor and Manufacturer.

TRADE MARK. Registered No. 2746.  
Special Terms to Wholesalers for Sheet or Sticks stamped with their own name.  
A sample box of 5d. sticks sent post free for 12 stamps. Price list and sample free.

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A. G. FENTIMAN (longest practical experience working for the Profession), assisted by four Dental Mechanics of 25, 23, 19, and 15 years' experience, executes guaranteed best materials only skilful and well-finished cases.

Of many received this is a recent testimonial:—"Since you have done my mechanical work all my cases have been most satisfactory. I have much pleasure in complimenting you upon your good, practical, well-finished cases."

PROMPT RETURN OF WORK MAY BE RELIED UPON.

Most moderate Inclusive Price List on application.

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**DIABETES.**

**GLUTEN FLOUR** Containing 7% Starch and no Sugar.

MANUFACTURED BY  
**G. VAN ABBOTT & SONS,**  
Manufacturers of all Foods for Diabetics,  
BADEN PLACE, CROSBY ROW, BOROUGH, LONDON, S.E.  
Telegraphic Address—"GLUTENS LONDON." ESTABLISHED 1859.



**ALEXANDRE'S SHADEINE**  
FOR COLOURING GREY HAIR.  
This popular article is largely advertised and stocked by all Wholesale Houses.  
TRIAL BOTTLES 6d. size supplied on 4/- per doz.; 8/6 size, 28/- per doz.  
36 Westbourne Grove, LONDON, W.

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SHOWCARDS, LABELS, POSTERS  
PRICE LISTS, WRAPPERS, TRANSPARENCIES, &c.  
Great Advantages to Large Buyers. Test Our Prices.  
ESTIMATES FREE. CORRESPONDENCE SOLICITED.

**THOMAS & CO., LEEDS.**

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**LORIMER & MOYES, Sundriesmen,**

Late 56 Howard St., Now at 191 Argyle St., GLASGOW.  
They call the attention of their customers to the New Address, 191 Argyle Street. These commodious premises have been fitted up specially to meet the requirements of their increasing business. Sole Agents in Scotland for  
**T. F. BRISTOW & CO.'S HIGH-CLASS SOAPS, PERFUMERY, & OTHER SPECIALITIES**  
An early call is solicited. Special attention is given to all letter orders.

**DRUGS GROUND**

FOR THE TRADE. POISONOUS, OR INFLAMMABLE,  
ARTICLES EXCEPTED. LARGE QUANTITIES  
PROMPTLY DEALT WITH. ENGINE 22.H.P.

**CHARLES GRAF.** 79 FENCHURCH ST.  
LONDON

NO CHEMIST should be without

**WATSON**

& **WATES'**

**HOMOEOPATHICS**

**CASES FREE.**

Send for Price List, &c.

**WATSON & WATES,** 93 LEADENHALL STREET,  
LONDON, E.C.

**TRY IT IN YOUR BATH.**

**SCRUBB'S CLOUDY FLUID AMMONIA**  
MARVELLOUS PREPARATION.

Refreshing as a Turkish Bath.  
Splendid Cleansing Preparation for the Hair.  
Allays the Irritation caused by Mosquito Bites.  
Restores the Colour to Carpets.

Of all Chemists, Etc.

Invaluable for Toilet Purposes.  
Removes Stains and Grease Spots from Clothing.  
Invigorating in Hot Climates.  
Cleans Plate and Jewellery.

Price 1s. per Bottle.

**SCRUBB & CO., CUILDFORD STREET, LAMBETH, LONDON, S.E.**

# CLASS BOTTLES

FOR

## Drugs

(Fluid and Powder),

Citrate Magnesia and Salines,

Castor and other Oils,



## Dispensing

(For Corks & Screw Stoppers),

Cough Mixtures,

Perfumery and Toilet  
Preparations,

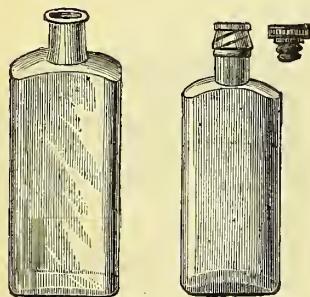
## Feeding

Embrocations,

Polishes (Boot & Furniture),

Disinfectants,

Stains, Varnishes,

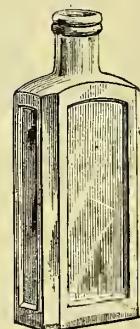


## Aërated Waters

(For Corks and Stoppers),

## Wines, Spirits

*And many other purposes.*



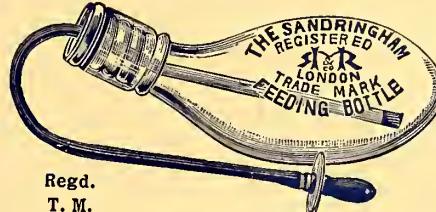
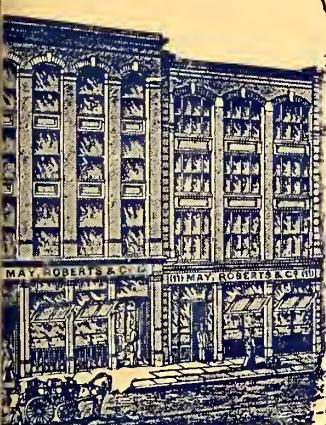
ILLUSTRATED PRICE LISTS ON APPLICATION TO

# KILNER BROTHERS,

■ NO. 3 G.N. GOODS STATION, KING'S CROSS, LONDON. ■

Three Minutes' Walk from Aldersgate St. Station.

## MAY, ROBERTS &amp; CO., LONDON.

Telegraphic Address: "FEEDING BOTTLES LONDON."  
Telephone No. 889, Holborn Exchange.Ask for Terms, carriage paid, in Free Packages.  
Complete Price List free by post on application with Business Card.Regd.  
T. M.

## THE SANDRINGHAM FEEDING BOTTLE.

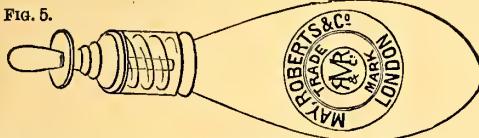
WHITE, Screw Glass Stoppers.

Each in handsome box, two brushes.

Per doz.

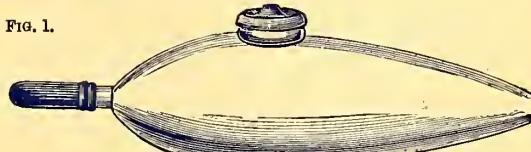
|                            |    |    |     |
|----------------------------|----|----|-----|
| Black fittings             | .. | .. | 5/- |
| Spare black fittings       | .. | .. | 2/- |
| Spare bottles              | .. | .. | 1/3 |
| Spare stoppers and washers | .. | .. | 9d. |

FIG. 5.

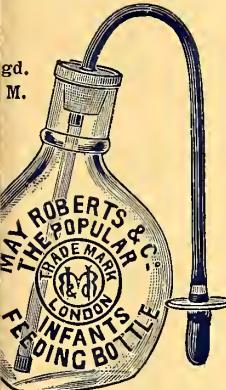


|                                                                           |     |
|---------------------------------------------------------------------------|-----|
| Glass, black leech-bite teat, bone shield, complete in boxes of dozen ..  | 3/3 |
| Glass, black leech-bite teat, bone shield, with brush, complete in box .. | 5/- |

FIG. 1.



White Glass, hand-made, fitted with black teat and boxwood-topped cork, with brush, complete in box, three sizes .. .. .. per doz. 6/9

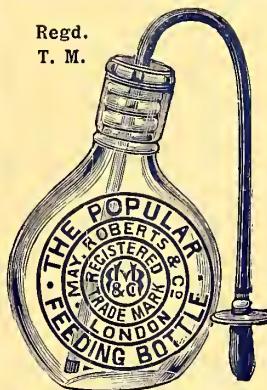


## THE POPULAR (6d.).

GREEN GLASS, Boxwood Tops.

Per gross.

|                                        |          |
|----------------------------------------|----------|
| Black fittings, 1 gross in cask (free) | 25/-     |
|                                        | Per doz. |
| Black fittings, 1 dozen in box ..      | 2/2      |
| Black fittings, each in box ..         | 2/7      |
| Spare black fittings ..                | 1/2      |
| Spare green bottles ..                 | 10d.     |
| Spare white bottles ..                 | 1/-      |

If with White instead of Green Bottles,  
2d. per dozen extra.Regd.  
T. M.

## THE POPULAR (6d.).

GREEN, Screw Glass Stoppers.

Per gross.

|                                               |          |
|-----------------------------------------------|----------|
| Black fittings, 1 gross in cask (free)        | 28 6     |
|                                               | Per doz. |
| Black fittings, 1 dozen in box ..             | 2/6      |
| Black fittings, each in box ..                | 2/11     |
| Spare black fittings ..                       | 1/4      |
| Spare green bottles ..                        | 1/-      |
| Spare white bottles ..                        | 1/2      |
| Spare stoppers and washers, green or white .. | 9d.      |

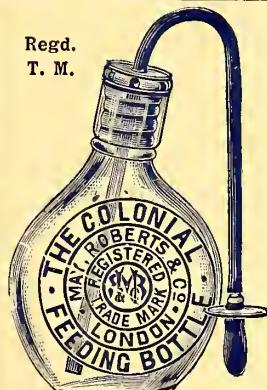
If with White instead of Green Bottles,  
2d. per dozen extra.

## THE COLONIAL (6d.).

GREEN GLASS, Boxwood Tops.

Per gross.

|                                        |          |
|----------------------------------------|----------|
| Black fittings, 1 gross in cask (free) | 25/-     |
|                                        | Per doz. |
| Black fittings, 1 dozen in box ..      | 2/2      |
| Black fittings, each in box ..         | 2/7      |
| Spare black fittings ..                | 1/2      |
| Spare green bottles ..                 | 10d.     |
| Spare white bottles ..                 | 1/-      |

If with White instead of Green Bottles,  
2d. per dozen extra.Regd.  
T. M.

## THE COLONIAL (6d.).

GREEN, Screw Glass Stoppers.

Per gross.

|                                               |          |
|-----------------------------------------------|----------|
| Black fittings, 1 gross in cask (free)        | 23 6     |
|                                               | Per doz. |
| Black fittings, 1 dozen in box ..             | 2/6      |
| Black fittings, each in box ..                | 2/11     |
| Spare black fittings ..                       | 1/4      |
| Spare green bottles ..                        | 1/-      |
| Spare white bottles ..                        | 1/2      |
| Spare stoppers and washers, green or white .. | 9d.      |

If with White instead of Green Bottles,  
2d. per dozen extra.

## POPULAR or COLONIAL (1s.).

WHITE, Earthenware Tops.

|                                            |    |    |    |          |     |
|--------------------------------------------|----|----|----|----------|-----|
| 2d. in box, two brushes, black fittings .. | .. | .. | .. | per doz. | 4/3 |
| 2d. black fittings ..                      | .. | .. | .. | ..       | 2/- |
| 2d. bottles ..                             | .. | .. | .. | ..       | 1/3 |

Fitted with Seamless Teats, 9-inch Tubing, and Glass Unions.

## POPULAR or COLONIAL (1s.).

WHITE, Screw Glass Stoppers.

|                                             |    |    |    |          |     |
|---------------------------------------------|----|----|----|----------|-----|
| Black fittings, each in box, two brushes .. | .. | .. | .. | per doz. | 4/3 |
| Spare black fittings ..                     | .. | .. | .. | ..       | 2/- |
| Spare bottles ..                            | .. | .. | .. | ..       | 1/3 |

ALL ABOVE SUBJECT TO USUAL TERMS.

MAY, ROBERTS &amp; CO., 9 &amp; 11 Clerkenwell Road, LONDON.

# Cadbury's Cocoa

**ABSOLUTELY PURE,  
therefore BEST.**

Cadbury's is "The Typical Cocoa of English Manufacture, Absolutely Pure." —*The Analyst.*  
NO CHEMICALS USED IN CADBURY'S AS IN THE SO-CALLED PURE FOREIGN COCOAS.

UNDER EMINENT SCIENTIFIC SUPERVISION

# "APENTA"



THE BEST NATURAL  
APERIENT WATER.

### **Trade Prices :**

Per Case.

|                  |   |      |                                                                      |
|------------------|---|------|----------------------------------------------------------------------|
| 25 Large Bottles | - | 20/- | Carriage Paid<br>to any Railway<br>Station in the<br>United Kingdom. |
| 50 Small         | „ | 32/6 |                                                                      |
| 100 Quarter      | „ | 32/6 |                                                                      |

5 per cent. Discount upon orders for 10 Cases.

**TERMS :—Six Months' Credit from date of Invoice,  
Net Cash.**

The retail prices printed on the labels are 1/3 per large bottle, 1/- per small bottle, and 6d. per quarter bottle.

**THE APOLLINARIS COMPANY, LIM.**

4 Stratford Place, Oxford Street, London, W.